



**Financial, Physical and Process Audit: An Independent Report Assessing and
Reconciling Physical and Financial Flows within Nigeria's Oil and Gas Industry
2013**

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Reconciling Physical and Financial Flows within Nigeria's Oil and Gas Industry
2013**

Presented by

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September, 2015



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September 2015

The Executive Secretary,

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Financial, Physical and Process Audit-An Independent Report Assessing and Reconciling Physical and Financial Flows within Nigeria's Oil Industry and Gas Industry-2013

TAJU AUDU & CO.(Chartered Accountants) in association with YKY Consulting (UK), was appointed by the NSWG in accordance with the requirements of NEITI act 2007 to carry out an Assessment and Reconciliation of Financial , Physical and Process Flows within the Nigerian Oil and Gas Industry for the year ended 31st December 2013.

The Engagement was undertaken in accordance with the International Financial Reporting Standards (IFRS) on Related Services applicable to agreed-upon procedures engagements. The procedures performed were those set out in the Terms of Reference appended to this report except stated otherwise in this report including its appendices.

We set out our findings in the following report; the procedures adopted in this engagement were not designed to constitute an audit or review made in accordance with the International Standards on Auditing (ISA). We therefore do not express any assurance on the transaction beyond the explicit statement set out in this reports. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

Our report is solely for informing the NSWG on the matters set out in the Terms of Reference and is not to be used for any other purpose.

The report relates only to the subject matter specifically set out herein and does not extend to any financial statement of any entity taken as whole.

Yours Faithfully,
For: Taju Audu & Co.


Tajudeen Audu, **FCA**
Engagement Partner.

LIST OF ABBREVIATIONS AND ACRONYMS

ACRONYM	DEFINITION
AENR	Agip Energy and Natural Resources Limited
AF	Alternative Funding
AFS	Audited Financial Statements
AGO	Automotive Gas Oil
AIP	Average Interest Percentage
AMNI	Amni International Petroleum Development Company Limited
APDNL	Addax Production Development Nigeria Limited
APENL	Addax Production and Exploration Nigeria Limited
API	American Petroleum Institute (measurement for heaviness crude)
BBL	Barrels
Bbl/d	Barrels Per Day
BIS	Bank for International Settlement
BOD	Banking Operations Department
BO	Beneficial Ownership
BOJ	Best Of Judgement
BOL	Bill of Lading
BSW	Basic Sediments and Water(amount of contaminants in crude)
BTU	British Thermal Unit
CA	Confidentiality Agreement
CAs	Carry Agreements
CAC	Corporate Affairs Commission

ACRONYM	DEFINITION
CAPEX	Capital Expenditure
CBN	Central Bank of Nigeria
CBN-MPR	Central Bank of Nigeria Monetary Policy Rate
CE	Covered Entity
CCC	Carry Capital Cost
CGT	Capital Gains Tax
CITA	Company Income Tax Act
CIT	Company Income Tax
CNL	Chevron Nigeria Limited
COMD	Crude Oil Marketing Division of NNPC
COSM	Crude Oil Stock Management
CRF	Consolidated Revenue Fund
CSU	Corporate Service Unit
CTR	Carry Tax Relief
DG	Director General
DMO	Debt Management Office
DPK	Dual Purpose Kerosene
DPR	Department of Petroleum Resources
E&P	Exploration and Production
ECA	Excess Crude Account
ECOWAS	Economic Community of West African States
EDT	Education Tax
EEZA	Exclusive Economic Zone Act

ACRONYM	DEFINITION
EIA	Environmental Impact Assessment
EIA	Energy Information Administration
EIC	Extractive Industry Company
EI	Extractive Industry
EOI	Expression of Interest
EITI	Extractive Industries Transparency Initiative
ESSO	Esso Exploration and Production Nigeria Limited
ERP	Enterprise Resource Planning
ES	Executive Secretary
FAAC	Federation Accounts Allocation Committee
FCT	Federal Capital Territory
FDE	Fraud and Debt Enforcement
FEC	Federal Executive Council
FES	Frontier Exploration Services
FGN	Federal Government of Nigeria
FHN	First Hydrocarbon Nigeria Limited
FIRR	Financial Internal Rate of Return
FIRS	Federal Inland Revenue Service
FMF	Federal Ministry of Finance
FOB	Free on Board
FRB	Federal Reserve Bank
GDP	Gross Domestic Product
GED F&A	Group Executive Director Finance &Account

ACRONYM	DEFINITION
GGM	Group General Manager(NNPC)
GID	Gas Infrastructure Development
GMD	Group Managing Director(NNPC)
GRC	Gas Regulatory Commission
GSA	Gas Sales Agreement
GSV	Gross Standard Volume
HPFO	High Pour Fuel Oil
HSE	Health, Safety & Environment
IAsSs	International Standards in Auditing
IDSL	Integrated Data Services Limited
IOC	International Oil Company
IPP	Independent Power Producer
ITA	Investment Tax Allowance
ITC	Investment Tax Credit
JDA	Joint Development Authority
JDZ	Joint Development Zone
JMC	Joint Ministerial Council of JDZ
JOA	Joint Operating Agreement
JVAFA	Joint Venture Alternative Funding Arrangement
JVC	Joint Venture Companies
JVCC	Joint Venture Cash Calls
JVF	Joint Venture Funding
JV	Joint Venture

ACRONYM	DEFINITION
KRPC	Kaduna Refinery and Petrochemical Company
LAN	Local Area Network
LC	Letter of Credit
LCV	Local Content Vehicle
LFN	Law of Federation of Nigeria
LNG	Liquefied Natural Gas
LOC	Local /Indigenous Oil Companies
LOR	London Oil Report
LPG	Liquefied Petroleum Gas
LPFO	Low Pour Fuel Oil
LR	Long Residue
MCA	Modified Carry Agreement
MMBTU	Million British Thermal Unit
MMBO	Million Barrels of Oil
MMC	Materials Movement Coordinator
MOR	Miscellaneous Oil Revenue
MOU	Memorandum of Understanding
MPNU	Mobil Producing Nigeria Unlimited
MPR	Ministry of Petroleum Resources
MT	Metric Tons
MV	Merchant Vessel
NAE	Nigerian Agip Exploration Limited
NAOC	Nigerian Agip Oil Company

ACRONYM	DEFINITION
NAPIMS	National Petroleum Investment Management Service
NBS	National Bureau of Statistics
NCDA	Nigerian Content Development Act
NCDMB	Nigerian Content Development and Monitoring Board
NCS	Nigeria Customs Service
NDDC	Niger Delta Development Commission
NDPR	Niger Delta Petroleum Resources
NEITI	Nigeria Extractive Industries Transparency Initiative
NESS	Nigerian Export Supervision Scheme
NESREA	National Environmental Standards and Regulations Agency
NETCO	National Engineering & Technical Company
NGC	Nigerian Gas Company
NGL	Natural Gas Liquid
NHT	Nigerian Hydro Carbon Tax
NIADBMS	NEITI Industry Audit Data Base Management System
NIMASA	Nigerian Maritime Administration and Safety Agency
NIPEX	Nigerian Petroleum Exchange
NIWA	National Inland Waterways Authority
NLNG	Nigeria Liquefied Natural Gas
NNPC	Nigerian National Petroleum Corporation
NNOC	Nigerian National Oil Corporation
NOC	National Oil Company
NOSDRA	National Oil Spill Detection and Response Agency

ACRONYM	DEFINITION
NPA	Nigerian Petroleum Act
NPC	National Planning Commission
NPDC	Nigerian Petroleum Development Company
NSE	Nigerian Stock Exchange
NSV	Net Standard Volume
NSWG	National Stakeholders Working Group
NXP	Nigeria Export Proceeds
OAGF	Office of the Accountant General of the Federation
OEL	Oil Exploration License
OGJ	Oil and Gas Journal
OML	Oil Mining Lease
OPCO	Operating Company
OPCOM	Operating Committees
OPEC	Organization of Petroleum Exporting Countries
OPIC	Overseas Private Investment Corporation
OPL	Oil Prospecting License
OPTS	Oil Producers Trade Section
OSP	Official Selling Price
OSP	Offshore Safety Permit
PA	Petroleum Act
PAYE	Pay As You Earn
PD	Positive Development/Displacement
PEFMB	Petroleum Equalization Fund Management Board

ACRONYM	DEFINITION
PGS	Petroleum Geo-Services
PHCN	Power Holding Company of Nigeria
PEL	Petroleum Exploration License
PHRC	Port Harcourt Refining Company
PIB	Petroleum Industry Bill
PLATFORM	Platform Petroleum Limited
PMS	Premium Motor Spirit
POCNL	Philips Oil Company Nigeria Limited
POOCN	Pan Ocean Oil Corporation (Nigeria) Limited
PPMC	Pipelines and Products Marketing Company
PPPRA	Petroleum Products Pricing Regulatory Agency
PPT	Petroleum Profits Tax
PRS&IT	Planning Research, Statistics and Information Technology
PSC	Production Sharing Contract
PSF	Petroleum Support Fund
PTDF	Petroleum Technology Development Fund
PWC	Price Waterhouse Coopers
QIT	Qua Iboe Terminal
RDP	Reserves Development Project
RMAFC	Revenue Mobilization Allocation and Fiscal Commission
RP	Realisable Price
RPP	Returns Payment Processing
SAP	System Application Products (NNPC)

ACRONYM	DEFINITION
SC	Service Contracts
SCRPPSD	Special Committee on the Review of Petroleum Products
SDN	Sovereign Debt Note
SDS	Sovereign Debt Statement
SEEPCO	Sterling Oil Exploration and Energy Production Company Limited
SEPCOL	Shebah Exploration and Production Company Limited
SEPLAT	Seplat Petroleum Development Company Limited
SFDP	Satellite Field Development project
SIR	Societe Ivoirennne De Raffinage
SNEPCO	Shell Nigeria Exploration and Production Company Limited
SOF	Satellite Oil Fields
SON	Standard Organisation of Nigeria
SPDC	Shell Petroleum Development Company
SPV	Special Purpose Vehicle
SRMF	Sole Risk Marginal Field
STD	Shipping and Terminal Department
STARDEEP	Star Deepwater Petroleum Limited
STP	São Tomé e Príncipe
SURE-P	Subsidy Reinvestment Program
SWIFT	Society for Worldwide Interbank Financial Transactions
TEPNG	Total Exploration and Production Nigeria Limited
TECOM	Technical Committee
TETFUND	Tertiary Education Trust Fund

ACRONYM	DEFINITION
TMP	Trial Marketing Period
TOR	Terms of Reference
TUPNI	Total Upstream Nigeria Limited
USD	United States Dollar
VAT	Value Added Tax
VGO	Vacuum Gas Oil
WAGP	West African Gas Pipeline
WHT	Withholding Tax
WRPC	Warri Refining and Petrochemicals Company

NEITI AUDIT 2013 OFFICIAL EXCHANGE RATE

COMPUTED AVERAGE EXCHANGE RATE FOR 2013 AS OBTAINED FROM OANDA.

AED	Yearly Average	CHF	Yearly Average	EUR	Yearly Average	GBP	Yearly Average	NGN	Yearly Average
3.67222		0.92675		0.75316		0.63953		157.70972	

Note: The above table shows the average exchange rate for the year 2013 as obtained from

Oanda Link: <http://www.oanda.com/currency/average>

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CHAPTER ONE

1 INTRODUCTION

1.1 Background to the Global EITI

The Extractive Industries Transparency Initiative (EITI) is a global coalition of governments, companies and civil society groups that promotes revenue transparency and accountability in the operations and management of resources accruable from the Oil, Gas and Mining Sectors.

EITI is based on the agreement of shared principles, which states that the wealth from a country's natural resource should benefit all its citizens and that this will require high standards of transparency and accountability. The Principles were agreed in June, 2003 and the rules were drawn up to ensure that all EITI member countries committed to a minimum level of transparency in company reporting of revenues paid and government reporting of receipts.

EITI issued a new global standard in July 2013 and this requires the production of comprehensive EITI Reports that include full government disclosure of extractive industry revenues and disclosure of all material payments to government by oil, gas and mining companies. The Requirements further provide for the reconciliation of company payments and government revenues to be undertaken by an Independent Administrator applying international professional standards and the report published annually alongside contextual information on the extractive industry.

1.2 Brief Historical Perspective of EITI implementation in Nigeria

The Nigeria Extractive Industries Transparency Initiative (NEITI) is a national subset of the global EITI as well as a national agency established by law. Nigeria signed up to the EITI in 2003 and enacted the NEITI Act on the 28th of May 2007 to domesticate the EITI principles and enforce its implementation. This law was the first pillar in the institutionalisation of NEITI and EITI process in Nigeria and also made Nigeria the first country to back up the global EITI principle by law. The NEITI act 2007 is a reference point in all advocacy, public agitation and demand for transparency in contemporary Nigeria.

A major function of NEITI as contained in the act is to develop a framework for transparency and accountability in the reporting and disclosure by all extractive industry companies revenues due to or paid to the Federal Government.

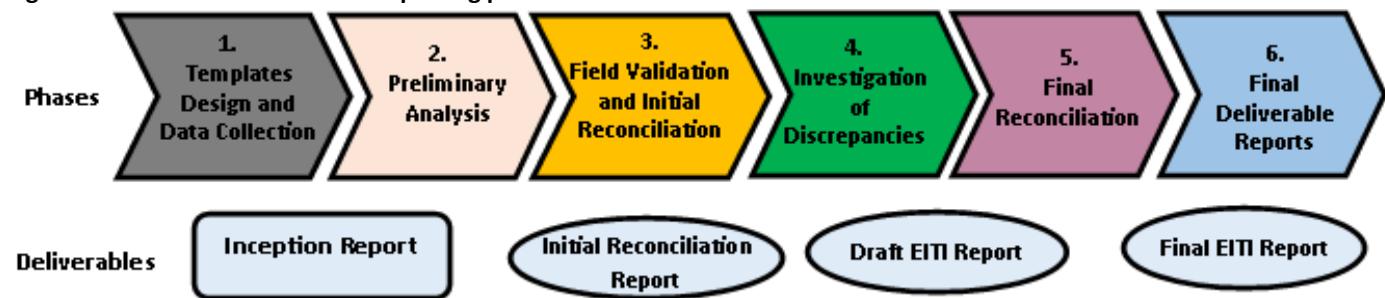
It was on the basis of the EITI Standard Requirements and the NEITI Act 2007 that the firm of Messrs TAJU AUDU & Co. was re-appointed for an Independent evaluation of material oil and gas payments and revenues for the year 2013 after the 2012 audit report in continuation of previous audit mandates that commenced with the first audit cycle of 1999-2004.

The purpose of this report is to present in explicit terms the results of the review and validation of all material payments and receipts associated with crude oil and gas as well as the reconciliation of these payments made by participants in the oil and gas sector and government receipts of such payments in accordance with International Auditing Standards and the Terms of Reference included in **Appendix 1.2**.

1.3 Approach and Methodology

The methodology and work approach adopted is in accordance with the EITI reporting process, which has six phases (see figure 1.3). The Consultant's responsibilities in each phase are elaborated below.

Figure 1.3 – Overview of the EITI Reporting process and deliverables



Standard data collection templates were prepared by NEITI and issued to Covered Entities. The consultant reviewed, validated and updated the populated templates for all relevant financial transactions and Oil and Gas volumetric for the year 2013 where necessary. The populated templates received from the Government Agencies were also reviewed, updated and analysed in comparison with populated templates from the companies in order to identify and reconcile material discrepancies.

The audited financial statements and records obtained from all the covered entities were reviewed to ensure that the populated templates are linked to the financial statements and company records. The policies and procedures for the preparation of Financial Statements and the procedures for payments were also documented and reviewed to ensure compliance with the International Standards in Auditing (IASs) and the relevant Oil and Gas regulatory laws on payments.

Applicable materiality guidelines, stipulated in the TOR were followed in addressing differences and discrepancies that arose from the reconciliation.

1.4 Objectives of the Audit

The objectives of the audit is to carry out the following tasks amongst others:

1. Report on the quantities of hydrocarbons (oil and gas and refined product, including condensate where appropriate) produced, exported and utilized/imported in a manner, which is insightful, and of such integrity as to be reasonably relied upon by NEITI and to also make recommendations on any issues arising in the course of conducting the work.
2. To report on the revenue flows and investment flows amongst the Covered Entities, as more fully described below, with transactions made by participants (both public and private) in Nigeria's oil and gas industry.
3. To undertake special verification work on certain classes of transactions.
4. To report on balances payable / receivable at the end of the audit period for certain financial flows.
5. To reconcile the physical/financial transactions reported by payers and recipients as appropriate, as per the scope set out herein.

1.5 Sources of Data

The primary source of data is the Data Templates completed by Government Agencies and the companies and returned to the auditor electronically for the purpose of the audit. Other primary sources of data are documents generated by the covered entities such as financial statements, accounting records and various transaction registers.

Publicly available data from various sources were also used to corroborate or reinforce information provided in the primary data. Data contained in past audit reports were also used in the analyses of current audit in other to be able to form an opinion.

Secondary data was sometimes generated by analyses and computations resulting from primary data sources or by third party confirmations.

1.6 Basis of Accounting

Cash basis of accounting was adopted in the sourcing of data for the audit while the audit procedures adopted for all Covered Entities was in accordance with the International EITI Guidelines, International Auditing Standards (IS4400 Engagements to perform agreed upon procedures regarding financial information) and the verification procedures as contained in the TOR.

1.7 Materiality Threshold

The Audit and Reconciliation services was conducted in line with the following materiality considerations approved by the NSWG:

- For aggregate revenue and investment flows to the Federation: zero point zero five percent (**0.05%**) of the annual total flow.

(This means that the permissible margin of error for aggregate reporting is zero point zero five percent of the aggregate value of all flows encompassed within our audit scope)

- All financial flows (excluding PAYE, VAT, WHT and CIT) of **\$5 million** and above shall be reconciled subject to a net reconciliation difference of **0.05%** for the aggregate value of total financial flows and total physical flows.

Our review of CBN Template revealed that 40 companies paid Petroleum Profit Tax (PPT) totalling **\$17.2 billion** with 9 companies each paying less than **\$5 million**. The total paid by the 9 companies is **\$5.96 million** representing **0.04%** of total PPT payment.

However, 26 companies paid royalty totalling **\$6.2 billion** with 6 companies each paying less than **\$5 million**. The total paid by the 6 companies is **\$8.74 million** representing **0.14%** of total Royalty paid.

On this basis and in consideration of the NSWG approved materiality threshold, the scope of the audit covered all producing companies, while only companies with material payments (above **\$5 million**) were reconciled. This implies that 2013 NEITI Report include **99.96%** of the flows reconciled on the basis of PPT payments while **99.86%** of the flows were reconciled on the basis of royalty payments with all other companies below the threshold making unilateral disclosures.

1.8 Scope of the Audit

As required by the disclosure provisions of the 2013 EITI Requirements (especially Requirement Nos 3, 4 and 5), the EITI Rules, and the Guidance note 9 of December 2013 containing suggested checklist establishing the scope of EITI Reporting, this report among others:

- Presents the contextual information on the Nigeria Oil and Gas Industry;
- Shows the financial and volumetric flows between Industry Operators and Government Agencies for the year 2013;
- Compares the initial submissions from both the Industry Operators and the Government Agencies;
- Identifies, investigates and explains material discrepancies;

- Reviews the Governance processes and procedures in the management of Oil and Gas sector financial and hydrocarbon flows;
- Reviews the systems and procedures utilized by the Covered Entities for purposes of calculating, recording, processing, and settling financial transactions, and;
- Makes recommendations for remedial actions to be taken where necessary.

1.9 Oil and Gas Companies covered

This reconciliation report specifically covers transactions for the period 2013 on Cash basis of accounting. The covered entities in the project include all participating Industry Operators that for the purpose of this audit are involved in Oil and Gas sector during the period under review and in accordance with the TOR.

The TOR specifically excludes all Oil and Gas entities without financial or production flow to the federation during the period under review.

1.10 Government Agencies Covered

The Government Agencies covered by the Audit are either those Government regulatory entities specifically mentioned in the TOR (CBN, OAGF, FIRS, DPR) or those that have responsibility and oversight functions in the receipt, disbursement or management of state finances accruing from the Oil and Gas sector (NNDC, NCMDB, NIMASA, NIWA). Others include state owned enterprises that are engaged in different strata of the Oil and Gas expenditure (NNPC and its subsidiaries).

1.11 Summary of financial flows

The following major revenue payments made by all Covered Entities and receipts by the relevant Government Agencies from the Oil and Gas sector were reviewed during the period except for NIMASA and NESS payments by companies which could not be confirmed to the relevant Government entities because the Entities did not provide corroborative data on the payments:

- a. Sale of Government Crude Oil and Gas
- b. Petroleum Profits Tax (PPT)
- c. Royalty (Oil & Gas)
- d. Concession Rentals
- e. Companies Income Tax (CIT)
- f. NDDC Levy

- g. NCDMB payments
- h. Withholding Tax (WHT)
- i. Pay-As-You-Earn (PAYE)
- j. Value Added Tax (VAT)
- k. Education Tax (EDT)
- l. Gas Flared Penalties
- m. NESS fees
- n. NIMASA payments
- o. NIWA payments

In addition to the above revenue flows, we have also reviewed other financial flows shown below:

- Cash Calls
- Dividends and Loan Repayment from NLNG
- Subsidy Payments

Non-financial flows pertaining to "in-kind" transactions and the settlement of liabilities of royalties and taxes and Carried Party Carry Cost and other items by means of crude oil allocations rather than financial transfers were also reviewed.

1.12 Summary of Physical and Process flows

The physical and process flows covered in this report include the following:

- Production and Terminal balances.
- Process for Pricing of Federation Equity Crude Oil
- Product importation and distribution
- Production and Utilization of gas
- Hydrocarbon metering system
- Review of Systems and Procedures
- Production arrangements and licensing
- Recommendations on the review process

1.13 Data Quality and Review of Templates

Companies' data provided in the completed templates were comprehensively reviewed and also vouched (for consistency) to accounts that have been audited to Financial Statements and explanations obtained from the companies where discrepancies occur.

Copies of audited accounts were requested and obtained from all reporting companies.

The data provided on templates by government reporting entities were kept in accordance with the provisions of Nigerian laws, Government Financial Regulations and Generally Accepted Accounting Standards.

The Auditor General for the Federation has attested ([see Appendix 1.13](#)) that:

1. Government Agencies have fully declared all 'material flows' to the Nigerian Government, as set out on the reconciliation forms;
2. Those amounts are consistent with the Financial Statements of the Government for the period audited.

In our review, we have also excluded the following revenue flows.

- a) Financing of the budgets of Government entities.
- b) Internal flows between entities owned by NNPC.
- c) Commercial transactions between non-state companies, except to the extent necessary to validate transactions affecting terminal stock ownership, quantities and values.
- d) Commercial transactions between non-state companies and state agencies for which the consideration for such transactions does not involve Oil and Gas.
- e) Commercial transactions between state companies in which the subject or the consideration for such transaction does not involve oil or gas.
- f) Crude Oil theft is reported as presented by companies but not considered in the summary of financial flows.

It is in the opinion of the audit, that reconciled data reported by Government Entities and Companies are reliable and consistent with the underline records made available at the respective Entities. Appropriate confidentiality agreements were also signed in order to safeguard information provided by the companies.

CHAPTER TWO

2 CONTEXTUAL INFORMATION ON NIGERIAN OIL AND GAS INDUSTRY

2.1 Introduction

Nigeria is located within Sub – Saharan Africa and has a total land area of 923,768.64 sq. km. It shares borders with the Republic of Benin in the west, Cameroon in the East, Niger and Chad in the north and the Gulf of Guinea to the South. With a population estimate of about 170 million people, Nigeria is the largest country in Africa and the largest producer and exporter of Crude Oil on the continent. Nigeria also has the largest natural gas reserves in Africa and is among the world's top five exporters of LNG. Given these large reserves of human and natural resources, the country has significant potential to build a prosperous economy characterized by rapid economic growth that can significantly reduce poverty and inequality while at the same time improving standards of living of the population through better access to and quality of health care, education and infrastructure services.

Unfortunately, this potential has not been achieved due partly to the over-dependence on Crude Oil and Gas revenue and lack of transparency in the Oil and Gas Sector. The importance of NEITI in the improvement of governance in the Oil and Gas sector for the overall interest of the vast majority of Nigerians can therefore not be overemphasised.

2.2 Overview of the Oil and Gas industry

Nigeria is estimated to have a proven oil reserve of **37.2 billion barrels** and a proven natural gas reserve of 180 trillion cubic feet (Tcf), which is the World's 7th largest gas reserve.

Out of the thirty-six constituent states of the federation, nine states (Abia, Akwa Ibom, Bayelsa, Cross Rivers, Delta, Edo, Imo, Ondo and Rivers) situated in the southern part, particularly the Niger Delta region of the Country produce the onshore oil and gas, while the source of the country's offshore production is from wells in the Bight of Bonny, Bight of Benin and the Gulf of Guinea.

The United States traditionally had been the largest importer of Nigeria's oil until the last few years, it is worthy to note that in 2011, **33% (767,000 bbl/d)** of Nigeria's crude oil export was sent to the United States, making Nigeria the fourth largest foreign crude oil supplier to the U.S. However with the recent exploration of Shale Oil by the U.S, India is now the largest importer of Nigeria's oil, importing 370,000 bpd or **18%** of total crude exports in 2014.

Nigeria is also heavily dependent on the importation of Petroleum Products, importing about 164,000 bpd of petroleum products in 2013 despite having four refineries with a combined crude oil distillation capacity of 445,000 bpd. The refineries operate below full capacity because of operational failures, fires, vandalism

and sabotage on the crude pipelines conveying domestic crude oil to the refineries. The combined capacity utilisation of the four local refineries was **22%** in 2013.

Nigeria operates a regime of subsidy on petroleum products and this has been a contentious political and economic issue. According to Energy Global magazine, fuel subsidies costs was about **US\$8 billion** in 2011, accounting for **30%** of the government's expenditure, approximately **4%** of GDP and **118%** of the capital budget. Fuel subsidy costs reported in the last NEITI Audit Report was about **\$8.6 Billion** for year 2012.

The production and development of the huge natural gas reserve has been constrained largely due to the lack of infrastructure to monetise natural gas that is currently flared. This is apart from the fact that the natural gas industry is affected by the same security and regulatory challenges that affect the Oil Industry.

Nigeria exports the vast majority of its natural gas in the form of LNG through the partly government owned Nigeria Liquefied Natural Gas (NLNG) company. The 2012 NEITI report gave Cumulative revenue of **US\$11.6 billion** due to Nigerian government from NLNG as unaccounted for.¹

2.3 Legal Frameworks, Legislations and Fiscal Regimes in the Nigerian Oil & Gas Industry

The Constitution of the Federal Republic of Nigeria 1999, section 44(3), vest the ownership and control of all minerals, mineral oils and natural gas in, under or upon any land in Nigeria, its territorial waters, and exclusive economic zone on the Federal Government. The Federal Government is to manage such minerals in such manner as may be prescribed by the National Assembly. Thus the Constitution confers exclusive jurisdiction on the National Assembly on matters relating to oil, gas and other minerals.

The Petroleum industry as it is today is governed through a myriad of Principal and subsidiary pieces of inter related legislations dealing with specific aspect of the operations of the Oil and Gas industry.

There are aspects of the law stipulating ways in which businesses should be formed and organized. There are equally others that explain the industry's transactions, scope of operation, responsibility to government, consumers and the international community.

Key legislation relating to the sector includes the Petroleum Act Cap P10 LFN 2004 (the Petroleum Act), the Nigerian National Petroleum Corporation Act Cap N123 LFN 2004 (the NNPC Act), the Associated Gas Reinjection Act 2004 and the Associated Gas Re-injection (Amendment Act) 2004 (the Associated Gas Acts), the Petroleum Profits Tax Act Cap P13 LFN 2004 (the PPTA) and the Nigerian Oil & Gas Industry Content Development Act 2010 (the NCDA).²

¹ An overview of Oil and Gas Industry by Dennis Otiotio

² Nigeria Oil and Gas Report- Freshfields Bruckhaus Deringer LLP

The Federal Ministry of Petroleum Resources has overall regulatory oversight of the Nigerian oil and gas industry. The Ministry acts primarily through the Department of Petroleum Resources(DPR). Other regulatory bodies include the Petroleum Products Pricing Regulatory Agency(PPPRA), which regulates the rates for the transportation and distribution of petroleum products; the Federal Ministry of Environment, Housing and Urban Development, which is responsible for approving environmental impact assessment reports in respect of oil and gas projects; the Nigerian Content Development and Monitoring Board(NCDMB), which is responsible for ensuring compliance with the Nigerian Content Development Act (NCDA); and the Joint Development Authority(JDA), which is responsible for the supervision of petroleum activities within the Nigeria–São Tomé and Príncipe Joint Development Authority. The Nigerian National Petroleum Corporation (NNPC)also has regulatory roles that it performs through the Department of Petroleum Resources(DPR).³

2.3.1 Industry Reform - The Petroleum Industry Bill (PIB)

In recent years, the country has sought to overhaul the legislative framework relating to the oil and gas industry, restructure the regulatory and commercial institutions in the industry and also change the fiscal dynamics and reform the operational mechanisms of the upstream, downstream and natural gas industries.

This has resulted in the draft of the Petroleum Industry Bill (PIB) presented before the Nigerian parliament or National Assembly in July 2012. The draft contains changes to taxation regimes, improved economies for small, onshore developments, amended royalty structure and the unbundling of the State Owned Enterprise, the NNPC⁴. The passage of the bill, which is likely to have a significant impact on, the Nigerian oil and gas industry, has met a lot of resistance from the IOCs.

The PIB sets out to establish an omnibus legislation that will set transparent rules for the management of the Oil and Gas Industry.

More information about the NEITI position on the PIB can be obtained from the NEITI website:
www.neiti.org.ng/index.php?q=press-releases/neiti-and-debate-petroleum-industry-bill-pib

2.4 Highlights of Oil and Gas Contribution to the Economy

The Nigerian Economy is one of the fastest growing economies in Africa. It was ranked 36th in the world (in terms of nominal GDP) in 2012 and 30th in 2013 before rebasing (40th in 2005, 52nd in 2000), in April 2013,

³ Nigeria Oil and Gas Report- Freshfields Bruckhaus Deringer LLP

⁴ Petroleum Industry Bill (PIB) 2008

which made it the largest economy in Africa. Nigeria is also on track to become one of the 20 largest economies in the world by 2020.

The country recently changed its economic analysis to account for rapidly growing contributors to its GDP, such as telecommunications, banking, and its entertainment industry. As a result of this statistical revision, Nigeria has added **89%** to its GDP, making it the largest African economy. According to a Citigroup report published in February 2011, Nigeria will get the highest average GDP growth in the world between 2010 and 2050. The country is also one of the two countries from Africa listed among 11 Global Growth Generators countries.

The Oil and Gas Sector in Nigeria, employed the least number of employees in the Country in 2013. According to the National Bureau of Statistics Job Creation Survey Report for the 1st, 2nd, 3rd, and 4th quarters of 2013, out of the **10.97 Million** employed in 2013, the Oil and Gas Sector accounted for **582** employments, representing **0.01%** of the Total number employed in 2013⁵.

Although much has been said about the status of Nigeria as a major exporter of oil, Nigeria produces only about **2.7%** of the world's supply (Saudi Arabia: **12.9%**, Russia: **12.7%**, USA: **8.6%**) and to further put Oil and Gas production in perspective, the sector contributed about **13%** to Real GDP in 2013 (this will be lower if the informal sector is considered) compared to Agricultural sector which contributed **38.2%**. Therefore, though the petroleum sector is important, it remains in fact a small part of an overall vibrant and diversified economy⁶.

Table 2.4A – Growth Rate of Real GDP and Sectoral Shares (Percent)

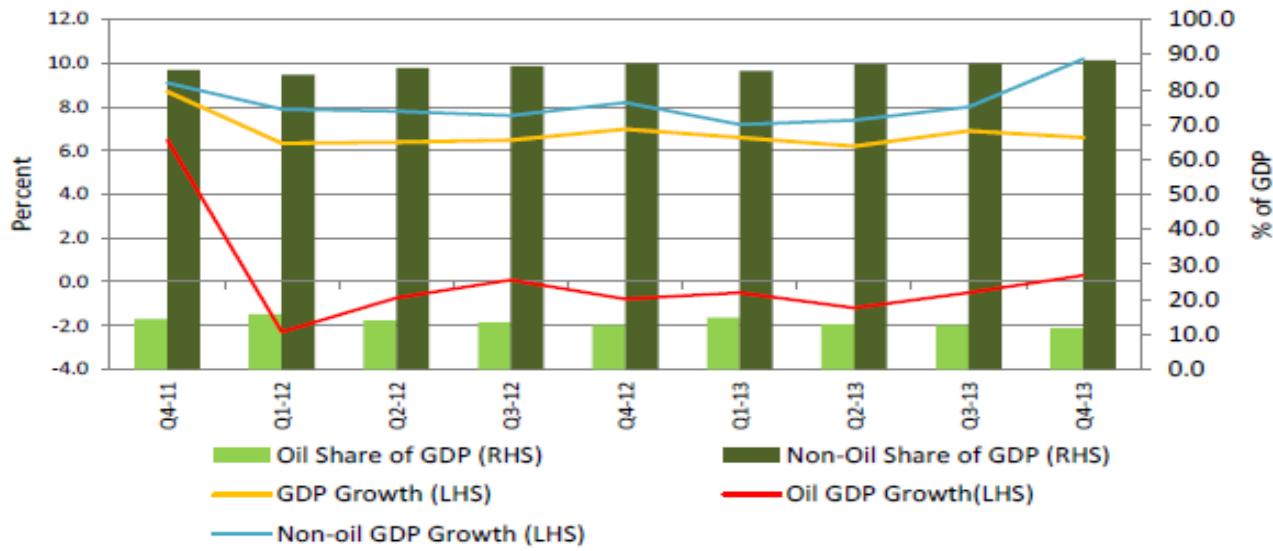
	Q4-11	Q1-12	Q2-12	Q3-12	Q4-12	Q1-13	Q2-13	Q3-13	Q4-13
Growth Rate (%)									
Real	8.7	6.3	6.4	6.5	7.0	6.6	6.2	6.9	7.7
Oil (Crude Petroleum/Natural Gas)	6.5	-2.3	-0.7	0.1	-0.8	-0.5	-1.2	-0.5	0.3
Non-oil	9.1	8.1	7.6	7.6	8.2	7.2	7.4	8.0	8.7
Share in Real GDP (%)									
Real GDP	100	100	100	100	100	100	100	100	100
Oil (Crude Petroleum/Natural Gas)	14.4	15.8	13.9	13.4	12.6	14.8	12.9	12.6	11.7
Non-oil	85.6	84.2	86.1	86.7	87.4	85.2	87.1	87.4	88.3

Source: Central Bank of Nigeria, Economic Report, Fourth Quarter 2013

⁵ <http://www.vanguardngr.com/2014/06/unemployment-oil-sector>

⁶ Central Bank of Nigeria (CBN), Economic Report, Fourth Quarter 2013

Figure 2.4A - Real GDP Growth Rate and Share of Oil and Non-oil in GDP



Source: Central Bank of Nigeria, Economic Report, Fourth Quarter 2013

The importance of the petroleum industry to the economic growth of the country can best be appreciated when the Central Bank of Nigeria statistics, which shows that Oil and Gas revenue constituted **69.9%** of Gross Federally-collected revenue in 2013, is considered.

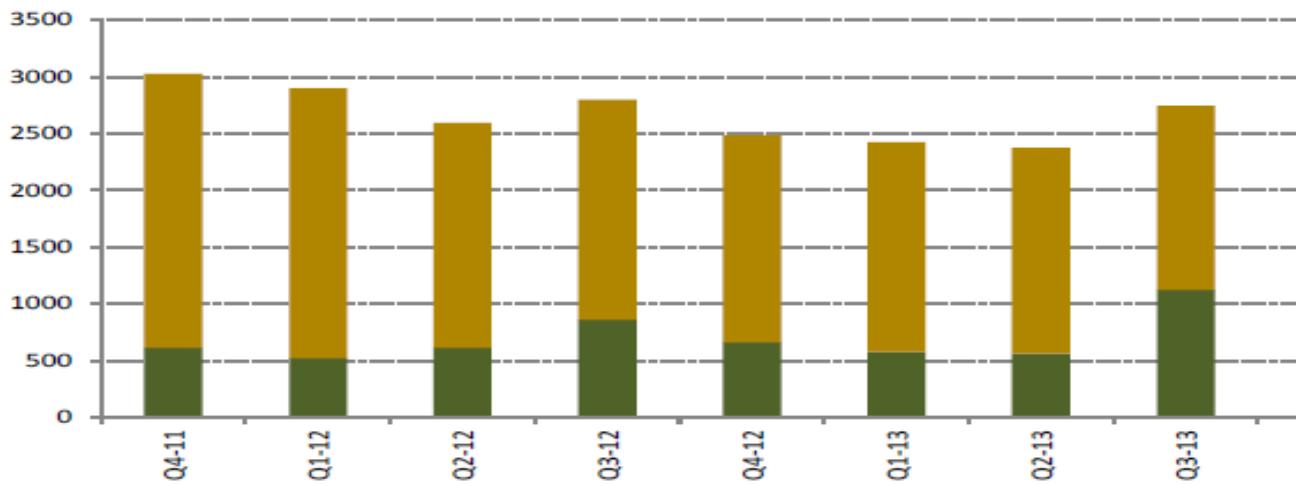
Table 2.4B, Figure 2.4B, Table 2.4C and Figure 2.4C below are illustrations of components and contributions to Federation Accounts Revenue.

Table 2.4B - Gross Federation Account Revenue (N billion)

	Q4-11	Q1-12	Q2-12	Q3-12	Q4-12	Q1-13	Q2-13	Q3-13	Q4-13
Federally-Collected Revenue (Gross)	3,025.1	2,955.4	2,596.2	2,602.3	2,484.1	2,425.3	2,373.8	2,746.7	2,201.9
Oil Revenue	2,408.1	2,376.0	1,981.6	1,936.2	1,823.6	1,849.5	1,813.8	1,622.8	1,538.4
Non-Oil Revenue	617.0	579.4	614.6	666.1	660.5	575.8	560.0	1,123.9	663.5

Source: CBN Economic Report, Fourth Quarter 2013

Figure 2.4B - Components of Gross Federally Collected Revenue



Source: CBN Economic Report, Fourth Quarter 2013

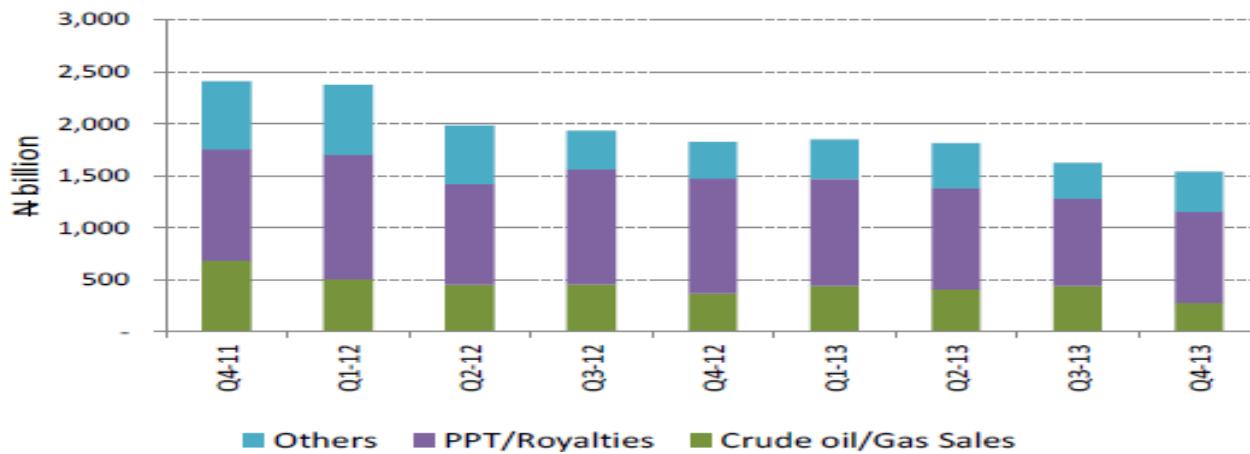
The main components of Gross Oil Revenue collected into the Federation account are Crude Oil and Gas sales (net of allocation to Joint Venture Cash calls), Petroleum Profit Tax, Royalties (Crude Oil and Gas). Others include Gas flared penalties, Concession Rentals and other taxes other than PPT.

Table 2.4C - Components of Oil and Gas Revenue

	Q4-11	Q1-12	Q2-12	Q3-12	Q4-12	Q1-13	Q2-13	Q3-13	Q4-13
Oil Revenue	2408.1	2376.0	1958.7	1936.2	1823.6	1849.5	1813.8	1622.8	1538.4
Crude oil/Gas Sales	683.4	506.5	452.5	455.2	366.7	439.1	403.8	440.1	275.9
PPT/Royalties	1070.9	1194.0	966.1	1103.5	1103.9	1030.2	973.1	840.4	875.3
Others	653.8	675.5	562.9	377.4	353.1	380.1	436.9	342.3	387.2

Source: CBN Economic Report, Fourth Quarter 2013

Figure 2.4C - Components of Oil and Gas Revenue



Source: CBN, Economic Report, Fourth Quarter 2013

2.5 Summary of Exploration and Production Data for 2013 Fiscal Year

The NNPC reported the acquisition of 4,695.67 sq. kms of 3D Seismic data, while 4,396 sq kms was processed/reprocessed. Thirty-Three (33) rigs were in operation and One hundred and Eighty-One (181) wells were drilled. Significant part of the exploration activity was in the North (Chad Basin) and the East (Anambra Basin)⁷.

The total production of Crude oil for 2013 is **800,488,000 bbl**, this is a drop of **7.63%** from **866,651,059 bbl** recorded in 2012. The breakdown of the production liftings is as shown in Table 2.5 below:

Table 2.5 -Total Production of Crude Oil for 2013 and the Breakdown of the Production Liftings

PRODUCTION	2013 Bbl'000
Total Opening Inventory	12,489
Production	800,488
Ekanga/Zafiro Crude	4,030
Total Inventory for Lifting	817,007
Terminal adjustment/shrinkage	(381)
Available Total Terminal Inventory	816,626
LIFTING	
Federation Export:	
Joint Venture Operators (JV)	79,929

⁷ NNPC 2013 Annual Statistical Bulletin

PRODUCTION	2013 Bbl'000
Production Sharing contractors (PSCs)	99,375
Service Contractors (SCs)	2,649
Sub –Total Federation Export	181,953
PPMC Domestic Crude Supply (Refining / Sales):	
Joint Venture Operator (JVs)	153,965
Production Sharing Contractors	4,849
Sub –Total Domestic Crude Supply (Refining / Sales)	158,814
Sub-Total: Federation +PPMC Lifting	340,767
Other Operators:	
JV Operators	167,466
Production Sharing Contractors PSCs	207,385
Service Contractors (SCs)	999
Sole Risk	65,667
Marginal Fields	18,054
Sub-Total: Other Operators	459,571
Total Lifting	800,338
Balance Closing Inventory	16,288

Source: NNPC-COMD Records

The Ekanga/Zafiro Crude Oil shown in the table above is the total production from the untised field in the Joint Development Zone (JDZ) of Nigeria and São Tomé and Príncipe

2.6 Government Participation in the Oil and Gas Sector

The NNPC is the State oil company that represents Government interests in the various production arrangements and contracts in the Oil and Gas Industry. It is a statutory corporation that also play regulatory roles aside from engaging in activities that span through the whole spectrum of the oil and gas value chain, from exploration, to production, refining, transportation, distribution and supply of petroleum products.

NNPC sometimes operates directly in petroleum operations (for example, its participation in upstream petroleum arrangements with international oil companies) and sometimes indirectly through subsidiaries. One of the more prominent subsidiaries is the Nigerian Petroleum Development Company (“NPDC”), which is engaged in petroleum exploration and production. Another well-known subsidiary is the Pipelines and Product Marketing Company Limited (“PPMC”). The PPMC is responsible for the transportation of crude oil to the refineries and the transportation of petroleum products to depots located in various parts of Nigeria.

Government has already commenced plans to privatise the PPMC as well as other subsidiaries operating in the downstream petroleum sector.

Another important arm of the NNPC is the National Petroleum Investment Management Services (“NAPIMS”). The NAPIMS is responsible for overseeing the investments of the Federal Government of Nigeria in upstream petroleum operations conducted under joint ventures, production sharing contracts and other petroleum arrangements with the international oil companies (“IOCs”).

In the downstream, NNPC has four refineries in Kaduna, Port Harcourt and Warri that were built between 1978 and 1985 with a total installed capacity of 445,000 bpd and these refineries are linked with a network of pipelines and Depots.

The Nigerian government in 1988 restructured the NNPC into six Directorates namely; Exploration and Production, Refineries and Petrochemicals, Finance and Accounts, Commercial and Investment, Corporate Services, and Gas and Power under a Group Managing Director. Twelve subsidiaries were also formed namely; Duke Oil, Hyson (Carlson Bermuda), Integrated Data Services Ltd (IDSL), National Engineering & Technical Co. (NETCO), Nigerian Gas Co. (NGC), Nigerian Petroleum Development Co. (NPDC), National Petroleum Investment Management Service (NAPIMS), Warri Refining & Petrochemical Co. (WRPC), Kaduna Refining & Petrochemical Co. (KRPC), and Port Harcourt Refining Co. (PHRC).

There are also indications that the current Nigeria government is on the path of restructuring the NNPC as part of the current investigations and reviews going on in the Oil and Gas Industry.⁸

2.7 Overview of Revenue collection from Oil and Gas Industry

The revenue payments from the Oil and Gas Industry are made to various tiers of government and Sub-National entities. Revenues paid to the National Government include the following:

a. Proceeds from sale of Government Crude Oil and Gas.

This refers to the Federal share of Crude Oil from the various production arrangements. It could be in the form of equity share from Joint Ventures (JVs) or Profit Oil from Production Sharing Contracts (PSCs). The proceeds are paid into the revenue account in both local (Domestic crude Oil) and foreign currency (Export crude Oil)

b. Petroleum Profits Tax (PPT)

The Petroleum Profits Tax (PPT) is a tax imposed on the profits from petroleum operations in an accounting period.

⁸ An overview of Oil and Gas Industry by Dennis Otiotio

- c. Royalty (Oil & Gas)
- d. Signature Bonuses
- e. Licenses and Concession Rental
- f. Gas Flared Penalties.
- g. Companies Income Tax (CIT)
- h. Value Added Tax (VAT)
- i. Withholding Tax (WHT)
- j. Pay-As-You-Earn (PAYE) of Federal Capital Territory residents.
- k. Education Tax (EDT)

The Withholding Tax deductions from individuals and Registered Business Names are payable to the States in accordance with the Personal Income Tax Act.

Other revenue flows to Sub-national entities are:

- a. Niger Delta Development Commission (NDDC) Levy
- b. Nigerian Content Development and Monitoring Board (NCDMB) payments
- c. Nigerian Export Supervision Scheme (NESS) fees
- d. Nigerian Maritime Administration and Safety Agency (NIMASA) payments
- e. National Inland Waterway Authority (NIWA) payments.

The various revenue flows to the Oil and Gas Industry mentioned above are discussed in Section 8.8.1 of this report.

2.8 Overview of Federation Revenue Distribution, Management & Expenditure

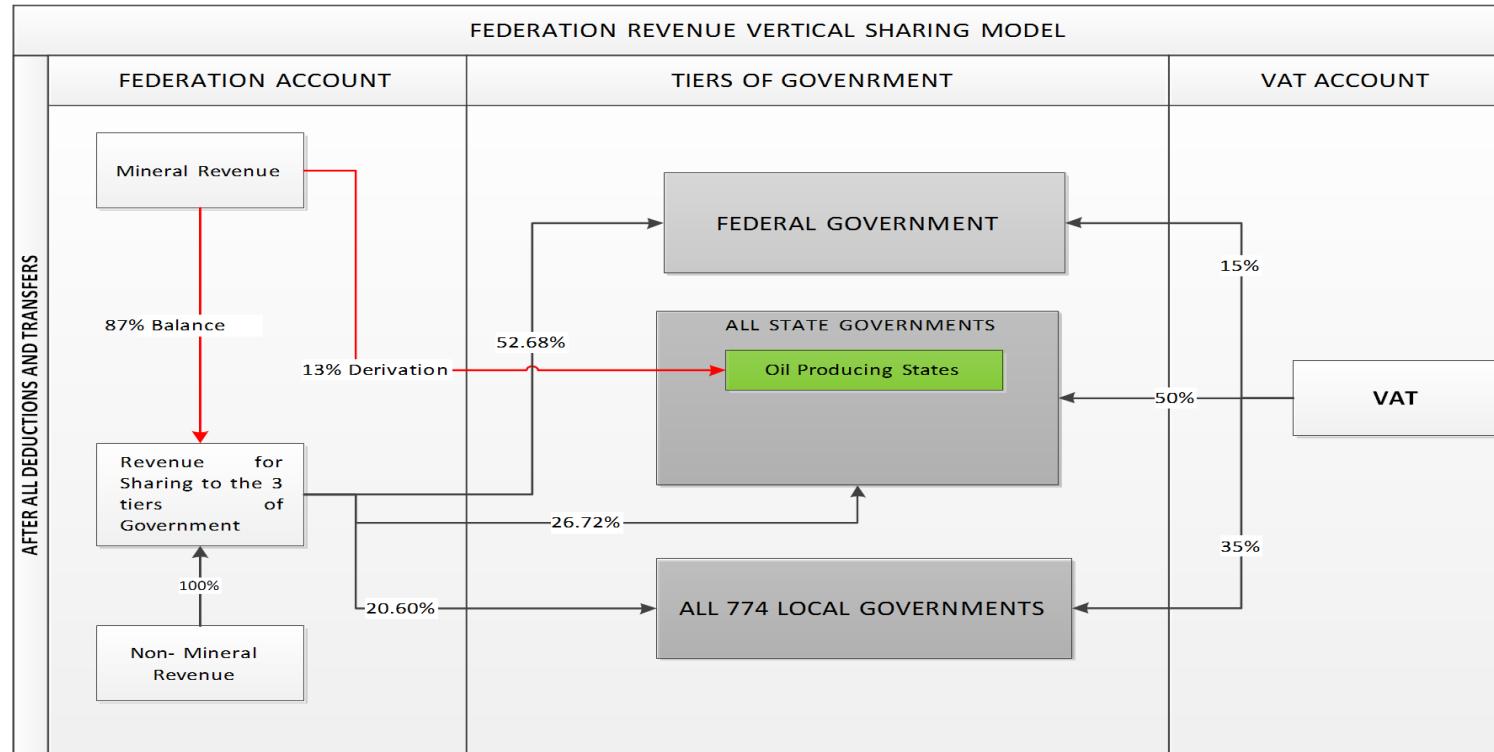
The Revenue Allocation Act provides for the Distribution of the federation funds. Section 1 of the Act provides that, “the amount standing to the credit of the Federation Account, less the sum equivalent to **13 per cent** of the revenue accruing to the Federation Account directly from any natural resources as a first line charge for distribution to the beneficiaries of the derivation funds in accordance with the Constitution is distributed among the Federal and State Governments and the Local Government Councils in each State of the Federation⁹.” The current Revenue Allocation Formula and distribution of Federation Account Revenue among the three tiers of Government are as follows:

⁹ Revenue Allocation Act, 2004

Table 2.8A: Revenue Allocation Formula

	%
Federal Government	52.68
State Government	26.72
Local Government Councils	20.6

Figure 2.8A – Federation Revenue Vertical Sharing Model



¹⁰Source: NEITI Fiscal Allocation and Statutory Disbursement (FASD) Audit 2007-2011 Summary Report

The distribution of revenue from the Oil and Gas Industry and other non-oil and gas sources is illustrated in Figure 2.8A above.

The percentage accruable to each tier of Government (36 states and 774 Local Governments) is shared among the constituents of each tier by applying factors such as Equality, Population, Land Mass, Internally Generated Revenue, Social Development (Health, Education and Water) while the 13% derivation fund deducted as a first line charge is further shared among the Oil producing states based on the derivation principle. The Federal Government also earmark special budgetary provisions for oil producing states of Abia, Akwa Ibom, Bayelsa, Cross Rivers, Delta, Edo, Imo, Ondo and Rivers States, which are channelled through the Federal Ministry of Niger Delta, and the Amnesty Programme under the Presidency for efficiency and effective impact.

The Niger Delta Development Commission (NDDC) also receives direct payments from oil and gas Industry to cater

¹⁰ NEITI Fiscal Allocation and Statutory Disbursement (FASD) 2007-2011 Summary Report

for the Oil producing states and this is not part of the federation budget.

More information on Accountant General of the Federation and Nigerian Bureau of Statistics can be obtained from : <http://oagf.gov.ng/> and <http://www.nigerianstat.gov.ng/> respectively.

Table 2.8B: Federation Account Allocation Statement for the period of January to December, 2013

DETAILS		JAN-DEC, 2013 ₦
Mineral Revenue		5,862,169,249,565.15
Deduction		(1,131,191,531,904.40)
Sub-Total		4,730,977,717,660.75
Non-Mineral Revenue		1,419,115,331,197.45
Deduction		(161,419,163,386.94)
Sub-Total		1,257,696,167,810.51
Grand-Total		5,988,673,885,471.26

Source: Office of the Accountant-General of the Federation

Table 2.8C: Analysis of Distribution: Oil and Gas Revenue for the period of January to December, 2013

DETAILS	Rate	JAN-DEC, 2013 ₦
Amount for Distribution		4,730,977,717,660.75
Federal Government	52.68%	2,168,282,783,647.40
State Government	26.72%	1,099,782,004,158.29
Local Government	20.60%	847,885,826,559.16
Derivation (13% of Mineral Revenue)	13.00%	615,027,103,295.90
Total		4,730,977,717,660.75

Source: Office of the Accountant-General of the Federation

Table 2.8D: Analysis of Distribution: Non- Oil and Gas Revenue for the period of January to December, 2013

DETAILS	Rate	JAN-DEC, 2013 ₦
Amount for Distribution		1,257,696,167,810.51
Federal Government	52.68%	662,554,341,202.58
State Government	26.72%	336,056,416,038.97
Local Government	20.60%	259,085,410,568.97
Derivation (13% of Mineral Revenue)	13.00%	-

Total		1,257,696,167,810.51
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Source: Office of the Accountant-General of the Federation

Table 2.8E: Analysis of Distribution: Oil and Gas/Non Oil and Gas Revenue for the period of January to December, 2013

DETAILS		JAN-DEC, 2013
		N
Amount for Distribution		5,988,673,885,471.26
Federal Government		2,830,837,124,849.98
State Government		1,435,838,420,197.26
Local Government		1,106,971,237,128.12
Derivation (13% of Mineral Revenue)		615,027,103,295.90
Total		5,988,673,885,471.26

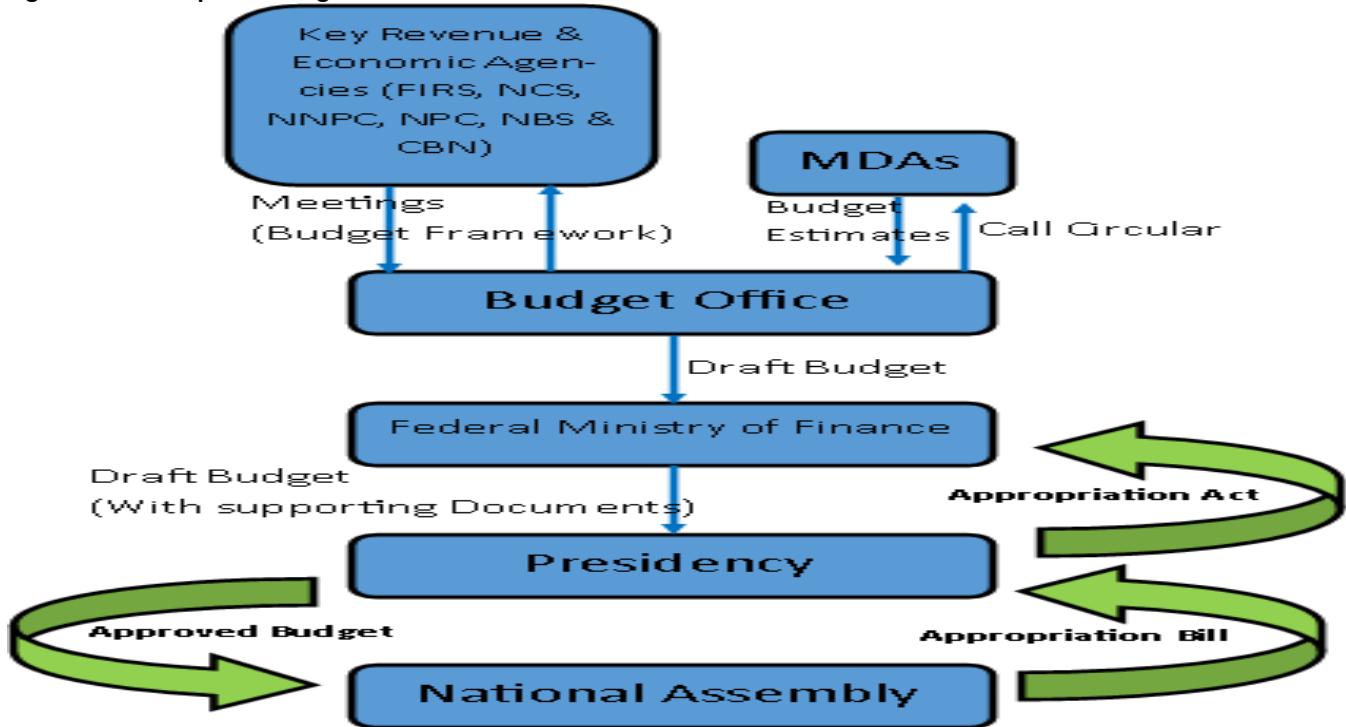
Source: Office of the Accountant-General of the Federation

The budgeting process at the Federal level is initiated through Budget Office meetings with key revenue generating agencies (including the Federal Inland Revenue Service, Nigerian Customs Service and the NNPC) as well as key economic agencies (including National Planning Commission, National Bureau of Statistics and the Central Bank of Nigeria).

The Budget Office, under the supervision of the Minister of Finance then issues a “Call Circular” instructing the Ministries, Departments and Agencies (MDAs) to submit estimates of their capital and recurrent expenditure requirements, which is evaluated and consolidated as a draft budget. The Minister of Finance subsequently presents the draft budget to the President for approval. The approved budget, together with supporting documents, is formally presented by the President to the joint session of the National Assembly for consideration and appropriation.

The two arms of the legislature separately consider and harmonize the draft budget and thereafter approves separately, after which it is presented as the Appropriation Bill to the President for assent. Once the President assents to the Appropriation Bill, it becomes an Act of parliament passed into law. The budgeting circle is shown in the flow diagram below:

Figure 2.8B – Simplified Budget Circle



More information on Budget Office of the Federation can be obtained from:
<http://www.budgetoffice.gov.ng/>

The Auditor General of the Federation is responsible for carrying out the audit of public accounts while post-budget period audits are the responsibility of the Public Accounts Committee (PAC). PAC examines historical records for disbursements and budget performance.

More information on Auditor General for the Federation can be obtained from:
<http://www.oaugf.gov.ng/>

2.9 Overview of Licensing and License Allocations

The Petroleum Act provides for three types of licenses in order to conduct upstream petroleum operations in Nigeria. Participants must first obtain from the Minister an **Oil Exploration License (OEL)**, **Oil Prospecting License (OPL)** or **Oil Mining License (OML)** to explore, exploit and produce petroleum (including natural gas) within the concession area. Only a company incorporated in Nigeria may be granted such a license. An application must contain prescribed information and be accompanied by the applicable fee.

An OPL gives the holder the exclusive right to explore and prospect for petroleum. The holder of an OPL, on successfully prospecting and discovering oil in commercial quantities, may apply for an OML. The OML is the final stage for petroleum exploration and production, giving the holder the right to explore for and dispose of any petroleum discovered within the area covered by the OML.

The duration of the licenses differ. An OEL is valid for one year and is renewable for a further one year provided the licensee fulfills prescribed conditions. The maximum tenure of an OPL is five years when granted over land and territorial waters and seven years when granted in respect of continental shelf and Exclusive Economic Zone areas. An OML has a term of 20 years but may be renewed on the written approval of the Minister. The OPL or OML is deemed to have attained commercial quantity if there is a production of 10,000 bpd from the lease area¹¹.

The list of existing OMLs, OPLs, equity holding companies, and type of commercial arrangements (JVs, PSCs, and Sole Risks etc.), effective date of subsisting ownership and other field data are contained in **Appendix 2.9**. No new licenses were issued in 2013.

2.10 Overview of Beneficial Ownership of Corporate Entities operating in the Oil and Gas Sector

There is currently no law in Nigeria that compels companies to disclose their Beneficial Owners. The 2013 NEITI Oil and Gas Audit sought to obtain the Beneficial Owners of Companies operating in the Nigerian Oil and Gas Industry as defined within the scope of the EITI requirement 3 and was able to obtain names of the natural person(s) who directly or indirectly (through another company) ultimately controls the corporate entity except for publicly listed companies and wholly owned subsidiaries.

Information on beneficial owners of Oil and Gas Entities is available to the public on application to the Corporate Affairs Commission by a registered Legal Practitioner or Chartered Accountant.

The companies provided information on Beneficial Owners as part of Audit Request and this was further validated by information provided by the CAC. The companies covered are those within the scope of the NEITI 2013 Oil and Gas Industry Audit.

Full details of the Beneficial Owners as completed by covered entities in the NEITI 2013 Oil and Gas Industry Audit and authenticated by information from the CAC is contained in **Appendix 2.10**.

¹¹ Petroleum Act 1969 and Petroleum (Drilling and Production) Regulation 1969

2.11 Overview of Operating Contracts Disclosure in Nigerian Oil and Gas Industry

Information relating to Oil and Gas exploitation Contracts are not freely available in the public domain. NEITI Oil and Gas audit 2013 therefore sought for the completion of contract data templates and full text of actual contract documents as part of the EITI requirements for a need to publicly disclose Contracts and Licenses that provide the terms attached to the exploitation of Oil and Gas.

Twenty-Nine (29) of the forty one (41) Companies covered in the audit, completed the Field legal contract templates showing type of commercial arrangements, shareholding structure between companies in the arrangement, OPL/OML number and date granted. Details of Field Legal Contracts as completed by the Companies are contained in **Appendix 2.11** to this report.

The operating contracts in the Nigeria Oil and Gas industry are classified into Joint Venture Agreements (JVs), Production Sharing Contracts (PSCs), the service contracts, Farm-out agreements and the Modified Carry Agreements (MCAs).

The Department of Petroleum Resources (DPR), which is responsible for the issuance and regulation of licenses, also has the standard formats of the contracts with Government and the complete listings of licenses and the type of contract arrangements. The NNPC, which usually signs the agreement on behalf of the Federation, also has copies of the agreements entered into on behalf of the Federation. Details of contracts and licenses provided by DPR are contained in **Appendix 2.9**

CHAPTER THREE

3 SUMMARY OF AGGREGATED FINANCIAL FLOWS

3.1 Introduction

The total Financial Flows from all sources in the Oil and Gas sector of the Extractive Industries in Nigeria in 2013 amounted to **\$58.080 billion**. These Financial Flows are summarised in Table 3.1 below.

The total flow from all sources as stated above was the revenue from Oil and Gas industry to the Federation and other sub-national entities in 2013. However, the actual collections into the Federation account was less than amount reported in the table below due to the differences between the physical values in Crude Oil and Gas flows and actual cash payments received into the various accounts. Specific details of these differences form part of this audit report and are discussed in Section 3.3.

In addition to the revenue flows in table 3.1, we have also reviewed the following financial flows:

- Cash Calls - section 6.6
- Subsidy Payments – section 7

These Financial flows and other Non-financial flows relating to "in-kind" transactions and the settlement of liabilities of Royalties and PPT as well as Carried Party Carry Cost and other items by means of crude oil allocations rather than financial transfers were also reviewed and discussed in this report.

Table 3.1: Summaries of Financial Flows from all Sources

	2013
	US\$'000
Sales of Crude Oil and Gas	
Federation Equity & Profit Oil	19,050,886
Domestic Crude	17,435,818
Gas	616,006
Feed Stock	1,357,525
Sales of Crude Oil and Gas (Total)	38,460,235
*Less: PSCs / MCAs in Kind Payments	
Petroleum Profit Tax (PPT) - PSCs/MCAs	10,273,854
Royalty (Oil) - PSCs/MCAs	993,167
MCA Gas CIT/EDT	83,954
MCA Royalty (Gas)	18,343
PSCs/MCAs in Kind Payments (Total)	11,369,318
Sub-Total (A)	27,090,917
Other Specific Financial Flows	
Petroleum Profit Tax (PPT)	17,591,512

	2013 US\$'000
Royalty (Oil)	6,182,319
Royalty (Gas)	119,093
**Signature Bonus	12,500
Gas Flared Penalties	18,475
Concession Rentals	133,750
Total Confirmed Flows	24,057,650
Other Flows to Federation Account	
Companies Income Tax (CIT)	556,050
Value Added Tax (VAT)	965,521
Total Other Flows to Federation Account	1,521,571
Sub-Total (B)	25,579,220
Total Flows to the Federation Account (A+B)	52,670,137
Other Flows	
Dividends & Repayment of Loans by NLNG	1,289,592
PAYE	168,524
Withholding Tax	991,693
Total other Flows	2,449,809
Flows to States and Local Govt.	
Withholding Tax	17,740
PAYE	556,030
NLNG Tax Payments to Local Govt.	1,089
Total Flows to States	574,859
Flows to other Entities	
Contributions to NDDC	562,921
Education Tax	1,477,764
NCDMB 1% Levy	115,925
***NESS Fee	63,100
***NIWA Levy	221
****Carbotage levy	164,945

	2013 US\$'000
Total Flows to other Entities	2,384,876
Grand Total	58,079,681

*These are Non-Financial Flows relating to in-kind transactions and the settlement of PPT and Royalty by means of Crude Oil and Gas allocations rather than direct financial payments and they are already captured along with the figures reported for Petroleum Related Taxes, Levies and Fees and are thus reported for memorandum purposes only.

**There was no Bid Round in 2013. However, payment for Signature Bonus was made in 2013 by Sigmund Oilfields Ltd for OPL 2012, which was not listed in the schedule of OPLs provided by DPR during the course of the audit.

***The figures for these sub-national payments are as confirmed by the companies covered in the 2013 Oil and Gas Audit. The total payment from Oil and Gas sector as reported by the Government Entities concerned is more than the figures above. This is because, some payments are not from companies within the audit scope while some others were made by shipping companies or other third parties and could not be directly traceable to any of the Oil and Gas Companies. The actual amount received into the NESS Fee account for Oil and Gas Export in 2013 is \$81,535,000 as confirmed by the audit. Whereas, CBN reported \$43,843,040 (N6,914,473,623.06) but CBN could not provide details of the individual Payees for audit verification.

****Cabotage levy is as reported by the companies. NIMASA, which is the organisation charged with the administration of Cabotage Act did not provide information on the actual Cabotage levy collection from Oil and Gas sector, which is expected to be in excess of the aggregate amount reported by the companies.

3.1.1 Comparison of 2013 Financial Flows with the Flows from 2009 to 2012 Audit Cycle

Presented in Table 3.1.1 below is a comparison of the 2013 Financial Flows from the Oil and Gas Industry Audit against the Flows from 2009 to 2012 audit cycle in order to show the trends of flows in these periods.

Table 3.1.1: Comparison of Financial Flows

	2009 US\$'000	2010 US\$'000	2011 US\$'000	2012 US\$'000	2013 US\$'000	% Changes between 2012 and 2013
Sales of Crude Oil and Gas						
Federation Equity & Profit Oil	10,133,931	17,693,065	24,760,831	21,611,186	19,050,886	-12%
Domestic Crude	9,903,033	13,228,942	18,363,100	18,147,751	17,435,818	-4%
Gas	351,357	456,284	610,857	489,033	616,006	26%
Feed Stock	415,328	1,320,043	1,825,617	1,845,370	1,357,525	-26%
Sales of Crude Oil and Gas (Total)	20,803,649	32,698,334	45,560,405	42,093,340	38,460,235	-9%
*Less: PSCs / MCAs in Kind Payments						
Petroleum Profit Tax (PPT) - PSCs/MCAs	2,854,787	4,861,801	8,234,874	10,759,802	10,273,854	-5%
Royalty (Oil) - PSCs/MCAs	337,916	201,512	601,413	959,781	993,167	3%
MCA Gas CIT/EDT	-	-	-	-	83,954	
MCA Royalty (Gas)	-	-	-	-	18,343	
PSCs/MCAs in Kind Payments (Total)	3,192,703	5,063,313	8,836,287	11,719,583	11,369,318	-3%
Sub-Total (A)	17,610,946	27,635,021	36,724,118	30,373,757	27,090,917	-11%
Other Specific Financial Flows						
Petroleum Profit Tax (PPT)	5,399,508	8,590,183	18,763,688	18,851,676	17,591,512	-7%
Royalty (Oil)	2,578,360	3,853,835	6,041,396	6,725,282	6,182,319	-8%
Royalty (Gas)	30,658	75,327	90,076	107,601	119,093	11%
**Signature Bonus	5,000	-	216,146	-	12,500	100%
Gas Flared Penalties	19,300	17,873	22,487	24,580	18,475	-25%
Concession Rentals	1,446	1,151	2,225	2,895	133,750	4520%
Total Confirmed Flows	8,034,272	12,538,369	25,136,018	25,712,034	24,057,650	-6%
Other Flows to Federation Account						
Companies Income Tax (CIT)	236,347	367,998	273,481	441,048	556,050	26%
Value Added Tax (VAT)	1,289,346	910,620	1,005,030	770,834	965,521	25%
Total Other Flows to Federation Account	1,525,693	1,278,618	1,278,511	1,211,882	1,521,571	26%
Sub-Total (B)	9,559,965	13,816,987	26,414,529	26,923,916	25,579,220	-5%
Total Flows to the Federation Account (A+B)	27,170,911	41,452,008	63,138,647	57,297,675	52,670,137	-8%
Other Flows						
Dividends & Repayment of Loans by NLNG	879,839	1,427,512	2,537,503	2,795,531	1,289,592	-54%
PAYE	9,111	3,510	13,120	87,918	168,524	92%
Withholding Tax	550,543	604,181	918,685	794,880	991,693	25%
Total other Flows	1,439,493	2,035,203	3,469,308	3,678,329	2,449,809	-33%
Flows to States and Local Govt.						
Withholding Tax	10,544	12,771	12,045	11,314	17,740	57%
PAYE	471,758	476,516	586,001	197,667	556,030	181%
NLNG Tax Payments to Local Govt.	-	-	-	36	1,089	2925%
Total Flows to States	482,302	489,287	598,046	209,017	574,859	175%
Flows to other Entities						
Contributions to NDDC	398,416	561,390	703,292	558,808	562,921	1%
Education Tax	638,364	407,107	533,035	1,120,421	1,477,764	32%
NCDMB 1% Levy	-	-	-	80,010	115,925	45%
***NESS Fee	-	-	-	-	63,100	100%
***NIWA Levy	-	-	-	96	221	130%
****Carbotage levy	-	-	-	-	164,945	100%
Total Flows to other Entities	1,036,780	968,497	1,236,327	1,759,335	2,384,876	36%
Grand Total	30,129,486	44,944,995	68,442,328	62,944,356	58,079,681	-8%

3.1.2 Analysis of Financial Flows

The previous audit cycles witnessed a steadily increasing trend in the total Financial Flows to Federation from **\$30.129 billion** in **2009**, to **\$44.944 billion** in **2010**, and **\$68.442** in **2011**. However there was a decline in **2012** and **2013** to **\$62.944 billion** and **\$58.080 billion** respectively. The decrease in 2013 was largely due to a drop in the Sales Revenue from Crude Oil and Gas attributable to reduction in production and lifting volumes as in the case of 2012. The reduction in production and lifting Volumes is as a result of the following:

- Divestment of Federation equity in some OMLs, notably from NAOC and SPDC JVs from which NNPC lifted Crude Oil on behalf of NPDC instead of Federation account.
- Deferred production and Crude losses due to destruction of production facilities and pipeline breakages.
- Crude Theft

Figure 3.1.2A – 2009-2013 Comparative Financial Flows from all Sources

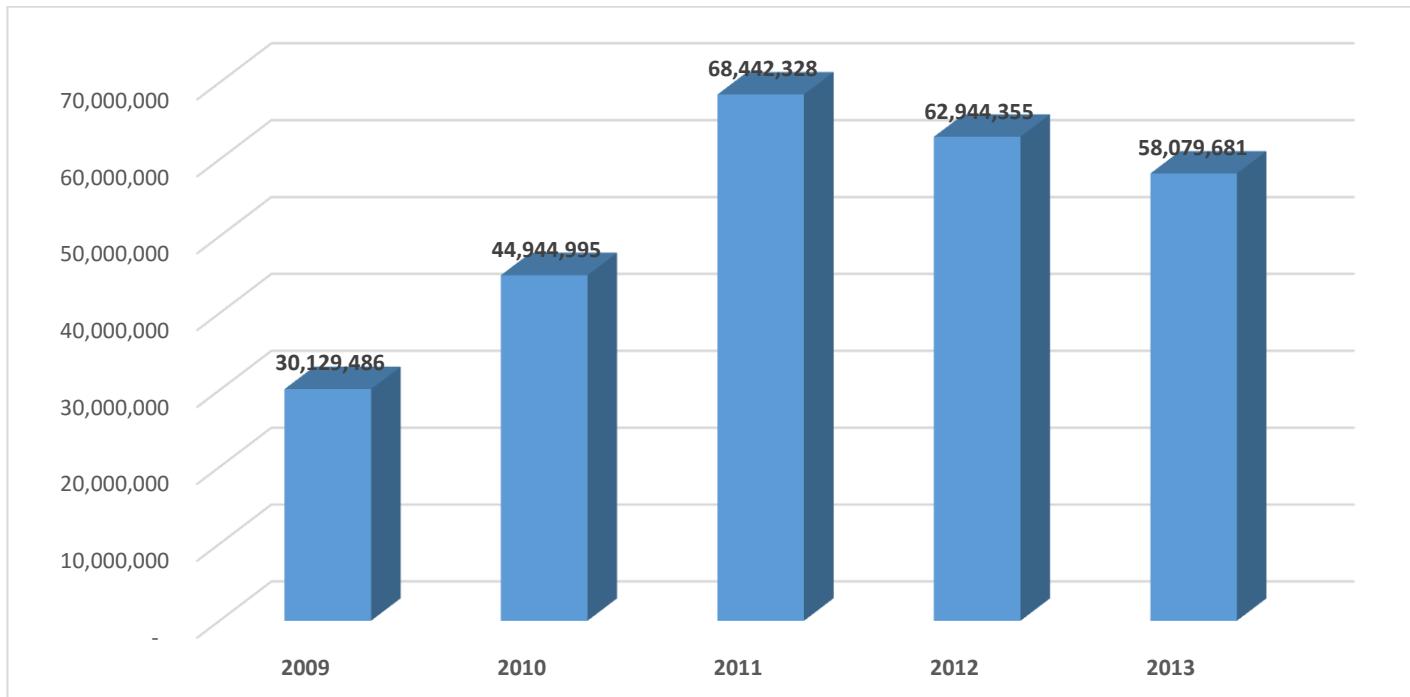
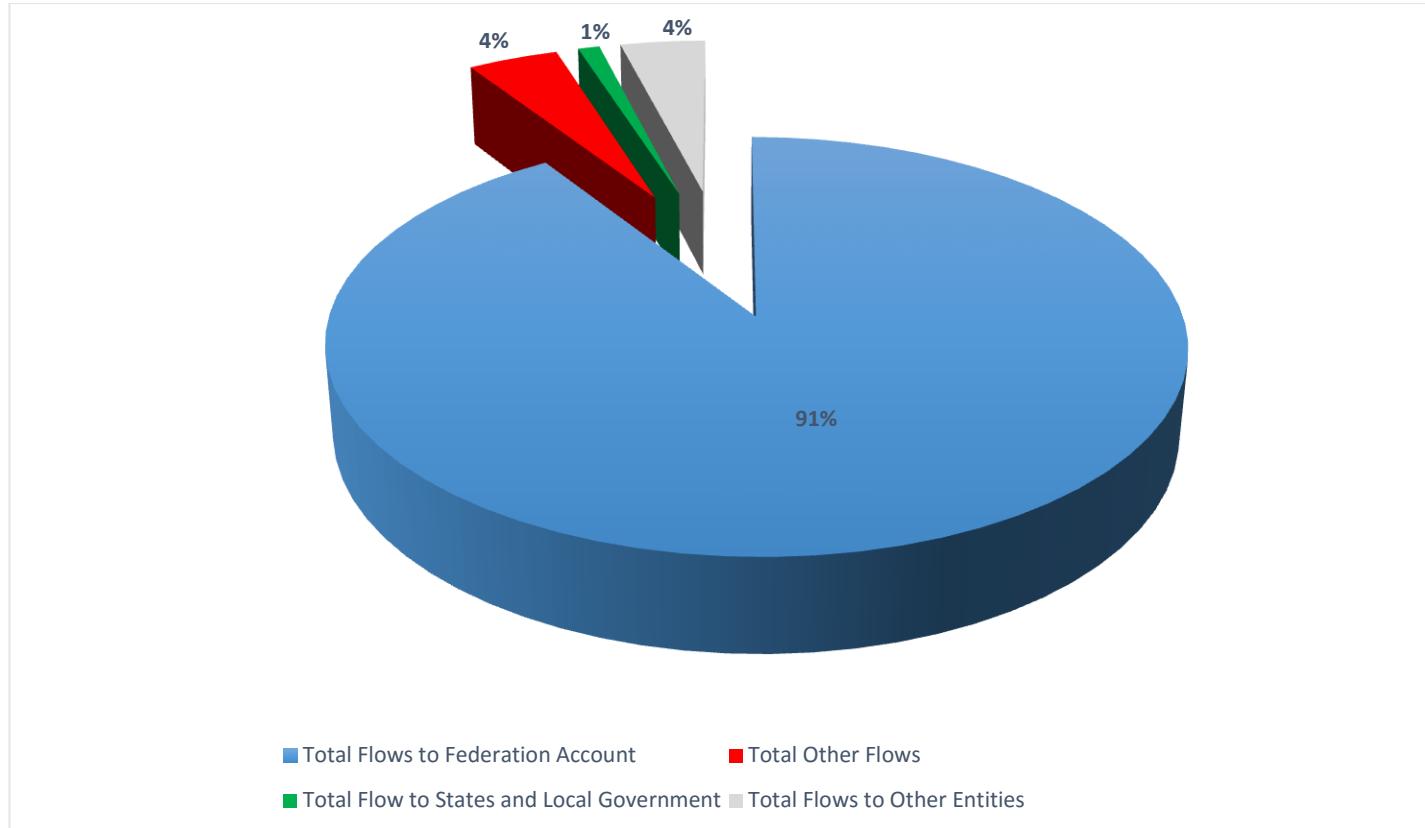


Figure 3.1.2B – 2013 Aggregated Financial Flows from all Sources



3.2 Reconciliation and Validation of proceeds of sales of Federation Equity Crude Oil and Gas

3.2.1 Introduction

The Federation of Nigeria is entitled to Oil and Gas revenue from its participation in various production arrangements in the Upstream Sector of the petroleum industry. These arrangements include Joint Ventures (JVs), Production Sharing Contracts (PSCs), Service Contracts (SCs), etc.

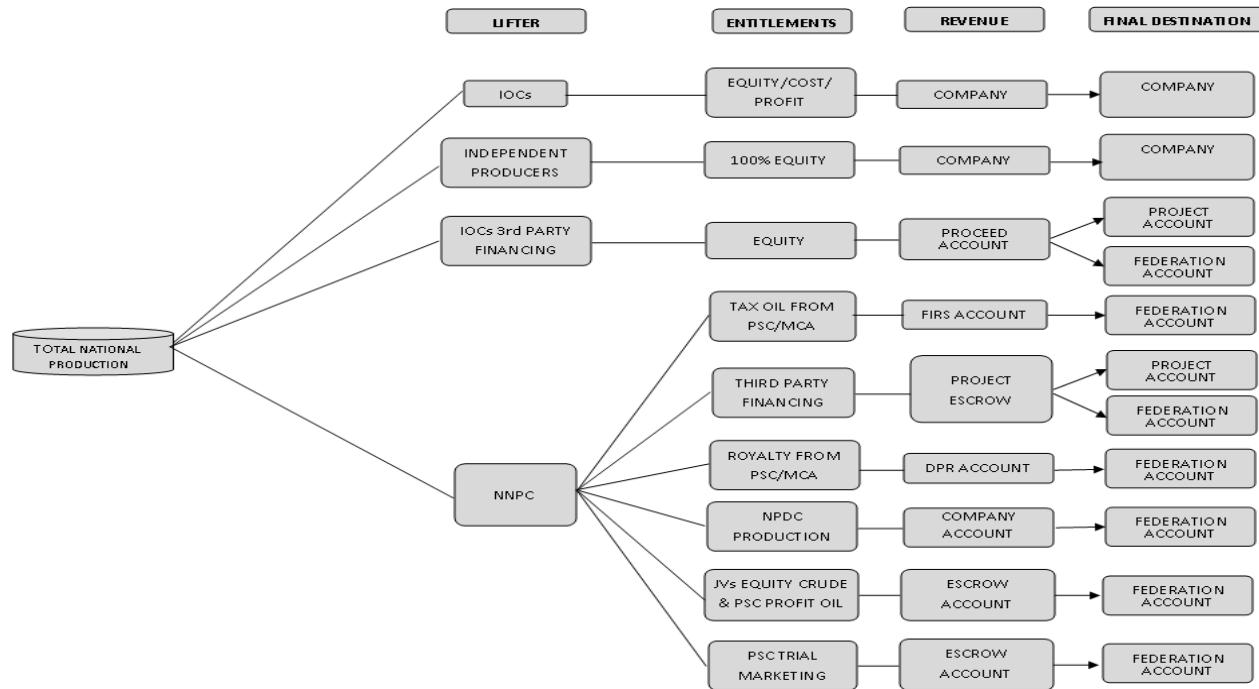
Crude oil and gas are normally allocated to the Federation from Joint Venture operations through the NNPC in accordance with the Federation's equity share or participatory interests in each of the Joint Venture operations. The Federation is also entitled to crude oil and gas from In-Kind payments for Royalty and Petroleum Profits Tax (PPT) as well as Profit Oil from Production Sharing Contract (PSC) operations in the

country. Furthermore, Oil and Gas Revenue is derived by the Federation from residual crude oil and gas production from JV fields under certain Alternative Funding arrangements such as Third-Party Financing arrangements and Carry Agreements (CAs) / Modified Carry Agreement (MCAs).

The NNPC-COMD is saddled with the responsibility to lift, market and sell all Government crude oil entitlements on behalf of the Federation from the above sources. The proceeds from the sale of the various lifting are, however, accounted for through designated foreign and local bank accounts with JP Morgan Chase and CBN for each of the parties (FIRS, DPR, NNPC, etc.). Thus, The Federation equity crude oil and gas is accounted for directly by the NNPC, while the sales proceeds, with respect to crude oil and gas lifting for Royalty and Petroleum Profits Tax / Companies Income Tax as well as Education Tax, are accounted through bank accounts opened and maintained by the DPR and FIRS respectively.

The off takers of the crude oil and gas are normally directed to make payments for the invoice values of their lifting of crude oil and / or gas – as the case may be – into the respective accounts, and the affected parties are informed by SWIFT messages when the transaction is completed. It is therefore the responsibility of the DPR to account for the sales proceeds of Royalty oil and gas while the FIRS accounts for Tax oil and gas as the case may be. The Central Bank of Nigeria remains the custodian of all the funds in the Foreign Bank Accounts. Below is the diagram depicting national Crude Oil production, lifting and revenue stream.

Figure 3.2.1 - National Crude Oil Production, Lifts and Revenue Streams



Source: Nigeria National Petroleum Corporation (NNPC)

3.2.2 Scope of Work

The scope of work and tasks performed are in line with the requirements of Validation of Federation Equity crude as detailed in 2013 NEITI Oil and Gas Audit Terms of Reference (TOR) contained in the attached **appendix 1.2** and in accordance with the EITI Standard requirements.

3.2.3 Approach and Methodology

In addressing the Specific Scope of Work, a Work Programme was designed covering key areas of Data Identification and gathering, Literature Review and comprehensive review of the template data provided by NNPC-COMD to ascertain their level of completeness or otherwise. Validation and Reconciliation on a 100% basis was carried out on all classes of transactions in the year under review, while discrepancies were investigated within the Materiality Threshold.

3.2.4 System Documentation and Procedural Review

NNPC Crude Oil Marketing Division (COMD) is responsible for the marketing and sale of Nigeria equity Crude Oil on behalf of the Federation. In this capacity, the NNPC-COMD also markets and sells crude oil for the

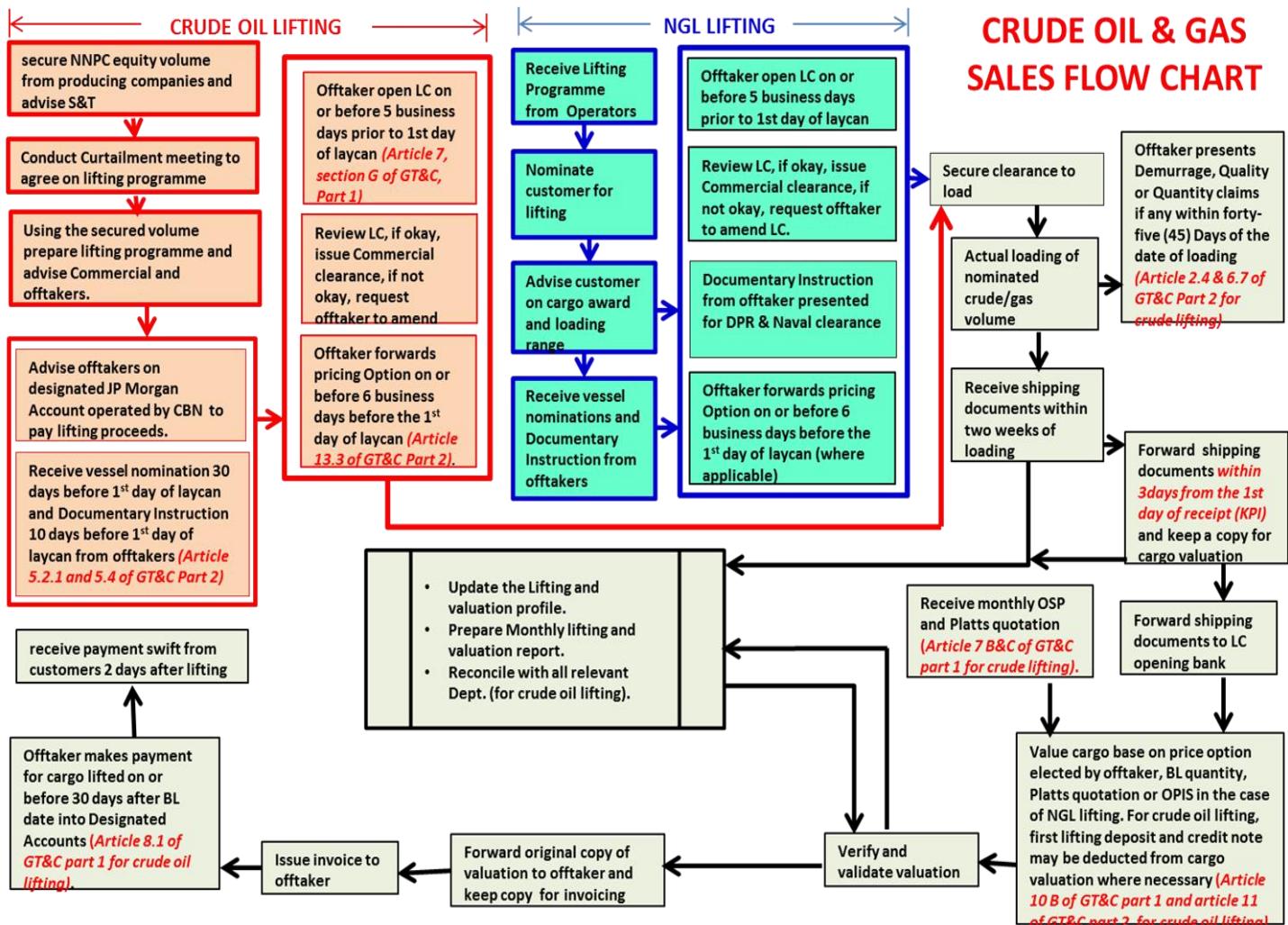
Account of DPR, FIRS, PPMC, certain Joint venture projects (Third party finance and MCAs), NPDC and Pan Ocean.

System Flow for Crude Oil Marketing begins with Curtailment Meeting usually held on every first week of every month between Staff of the Crude Oil Stock Management (COSM) and Representatives of Crude Oil Producers (PSCs, JVs, Marginal fields, etc.). Objectives of the Curtailment Meeting, among others include:

- To discuss the total crude oil production estimate by producers for the following month.
- To ascertain the Quantity of Crude Oil allotted to the NNPC, FIRS, and DPR and other stakeholders.

Other critical steps in the Crude Oil marketing process include the allotment to beneficiaries and off-takers, preparation of shipping documents, invoicing, Letters of Credits, payment by LC banks and reconciliation meetings. These critical steps are shown in the system flow diagram below while a more detailed descriptive step can be found in **appendix 3.2.4**.

Figure 3.2.4: System flow for Crude Oil and NGLs Sales

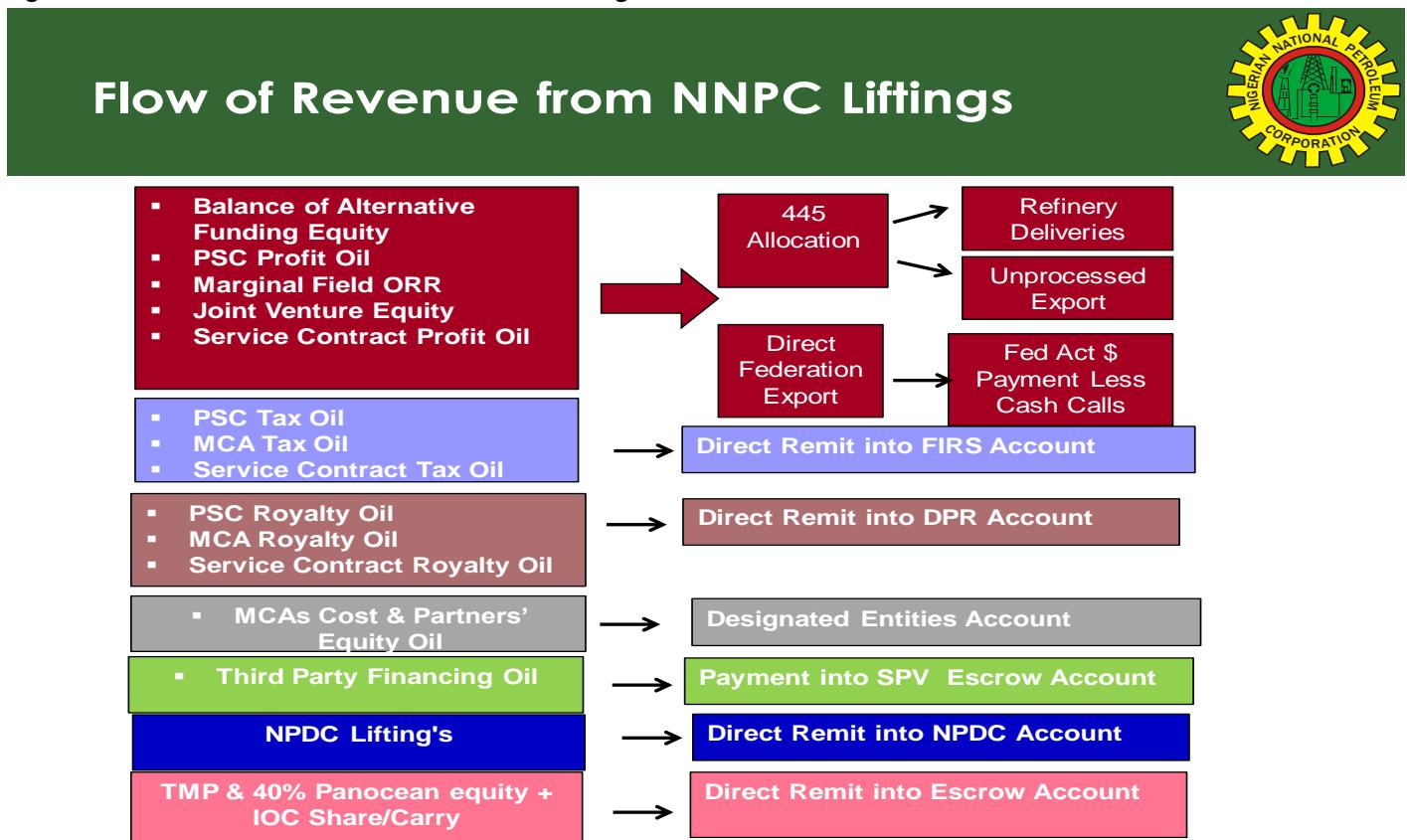


Detailed system Compliance Test Procedures on all Domestic and Export crude oil sales transactions in 2013 was also performed to ascertain amongst others, that the pricing methodology was correctly applied to all transactions. These test procedures and the results thereon are covered under section 8.14.1, which deals with the process of pricing Federation Equity Crude.

3.2.5 Revenue Flows from NNPC Lifting

Revenue Flows from NNPC Crude Oil lifting are for the Account of various Parties such as the Federation Entitlement, Federal Inland Revenue Service (FIRS), Department of Petroleum Resources (DPR), Modified Carrying Agreement (MCA) Escrow Accounts, NPDC Account, Pan Ocean Account (after deduction of Debt Service Charge), and these are depicted in the Diagrammatic Process Flow below.

Figure 3.2.5 - Revenue Flows from NNPC Crude Oil lifting



Source: NNPC- COMD

The diagram above shows the various lifting entitlements and the beneficiaries/ beneficiary accounts. Production volumes are allocated based on both company and NNPC entitlements while NNPC entitlement liftings are on behalf of FIRS, DPR, Federation (Profit Oil or Equity) and alternative Funding Partners. NPDC entitlements are also lifted by NNPC but payments made into NPDC account.

3.3 Reconciliation and Validation of Production Volume Delivered to Terminals

Validation and Reconciliation of Production Volume delivered to Terminals was carried out with the following objectives:

- a. To confirm the Production Volume Delivered to Terminals as per Record during the Period under Review.
- b. To confirm the basis of establishing NNPC entitlement in any peculiar arrangement.
- c. To compare the Expected Production Volume and the Actual Production as per Records of NNPC and DPR.

Documents obtained and reviewed in the validation process included populated Oil Terminal Balance Templates from Companies, DPR 2012-2013 Export Reconciliation Data as well as Terminal Receipts Reconciliation Data and the NNPC-COMD records of monthly production by the producers and lifting by all the parties.

3.3.1 Comparison of Production and Lifting Volume as per NNPC Record and DPR

From the review of NNPC-COMD Record of total Crude Oil production and lifting by all Stakeholders and DPR record of Terminal Receipts and Export Reconciliation Data, find below comparison of production and lifting data as per NNPC-COMD and DPR records:

Table 3.3.1A Comparison of Production Data as per NNPC-COMD and DPR Records

	Volume (bbls'000)
Production Data as per NNPC-COMD Record	
Joint Ventures (JVs)	399,412
Production Sharing Contract (PSC)	313,935
Service Contract (SC)	3,205
Sole Risk (SR)/Independent	64,589
Marginal Fields	19,347
Total as per NNPC-COMD Record (A)	800,488
Total Production data as per DPR Record (B)	801,026
Variance (A)-(B)	538

Note: The total production of 800.488 Million BBLS in table 3.3.3A excludes production from the unitized fields (Ekanga/Zafiro).

Table 3.3.1B Comparison of Lifting Data as per NNPC-COMD and DPR Records

Liftings	Volume		Variance
	NNPC-COMD (bbls'000)	DPR (bbls'000)	
Joint Ventures (JVs)	401,360	402,119	-759
Production Sharing Contract (PSC)	311,609	311,609	0
Service Contract (SC)	3,648	3,648	0
Sole Risk (SR)/Independent	65,667	65,667	0
Marginal Fields	18,054	17,884	170
Total Liftings	800,338	800,927	-589

3.3.1.1 Key Findings in the reconciliation of Production data in the records of NNPC to that of DPR

In the course of carrying out validation and reconciliation of Production and lifting volumes between the records of NNPC and DPR, it was noted that a difference of 538,000 bbls and 589,000 bbls exists in aggregate Production and lifting volumes respectively. This is a serious issue in the sense that:

1. The JV companies signed off all reconciled production figures with DPR and NNPC separately for the same period. Ideally, there ought to be no difference in the production volumes presented by NNPC and DPR as they were duly reconciled with the JVs. However, the volumes presented by NNPC and DPR are different in most cases.
2. Also, in some instances there were more than one reconciled production volume duly signed off by both DPR and the companies for the same period. For example DPR and Chevron jointly signed off **74,228,949 bbls** (2nd December, 2014 - Operator's Date and 17th November, 2014 – DPR's Date) and **74,879,296 bbls** (3rd December, 2014) as production volumes for Escravos crude type as well as **2,638,334 bbls** (3rd December, 2014) and **2,638,681 bbls** (3rd December, 2014) as production for Pennington crude type in separate documents.
3. It is worthy of note that the reconciliation of 2012 and 2013 production and lifting volumes between DPR and the companies did not take place until August 2014.
4. The signed off for production volumes was only done by both DPR and the JV companies without NNPC, a partner in the JV.

Implication

The recurring lack of reconciled positions between the records of NNPC and DPR puts doubt on the integrity of production and lifting figures and raises issues of accountability.

The differences between DPR and NNPC figures also accounted for the differences between Audit figures which are based on NNPC records and the companies reconciled figures with DPR.

Recommendation

All the stakeholders (NNPC, DPR and the Oil companies) to ensure timely, periodic and joint reconciliation of production and lifting volumes and update records accordingly.

3.3.2 Analysis of Inventory of Crude Oil at Terminal

Following from the Validation and Reconciliation of Total Crude Oil Production Volumes as well as NNPC Terminal Lifting, find below Analysis of Movement in Inventory of Crude Oil with respect to Opening Balances, Production, Lifting and Closing Balances in the year under review.

Table 3.3.2 - Analysis of Inventory of Crude Oil at Terminal (Crude Oil Production and Lifting)

PRODUCTION	2013 Bbl'000
Total Opening Inventory	12,489
Production	800,488
Zafiro Crude	4,030
Total Inventory for Lifting	817,007
Terminal adjustment/shrinkage	(381)
Available Total Terminal Inventory	816,626
LIFTING	
Federation Export:	
Joint Venture Operators (JV)	79,929
Production Sharing contractors (PSCs)	99,375
Service Contractors (SCs)	2,649
Sub -Total Federation Export	181,953
PPMC Domestic Crude Supply (Refining / Sales):	
Joint Venture Operator (JVs)	153,965
Production Sharing Contractors	4,849
Service Contractors (SCs)	
Sub -Total Domestic Crude Supply (Refining / Sales)	158,814
Sub-Total: Federation +PPMC Lifting	340,767
Other Operators:	

PRODUCTION	2013 Bbl'000
JV Operators	167,466
Production Sharing Contractors PSCs	207,385
Service Contractors (SCs)	999
Sole Risk	65,667
Marginal Fields	18,054
Sub-Total: Other Operators	459,571
Total Lifting	800,338
Balance Closing Inventory	16,288

3.3.3 Analysis of NNPC-COMD sales volumes on behalf of the Federation as per audit validation

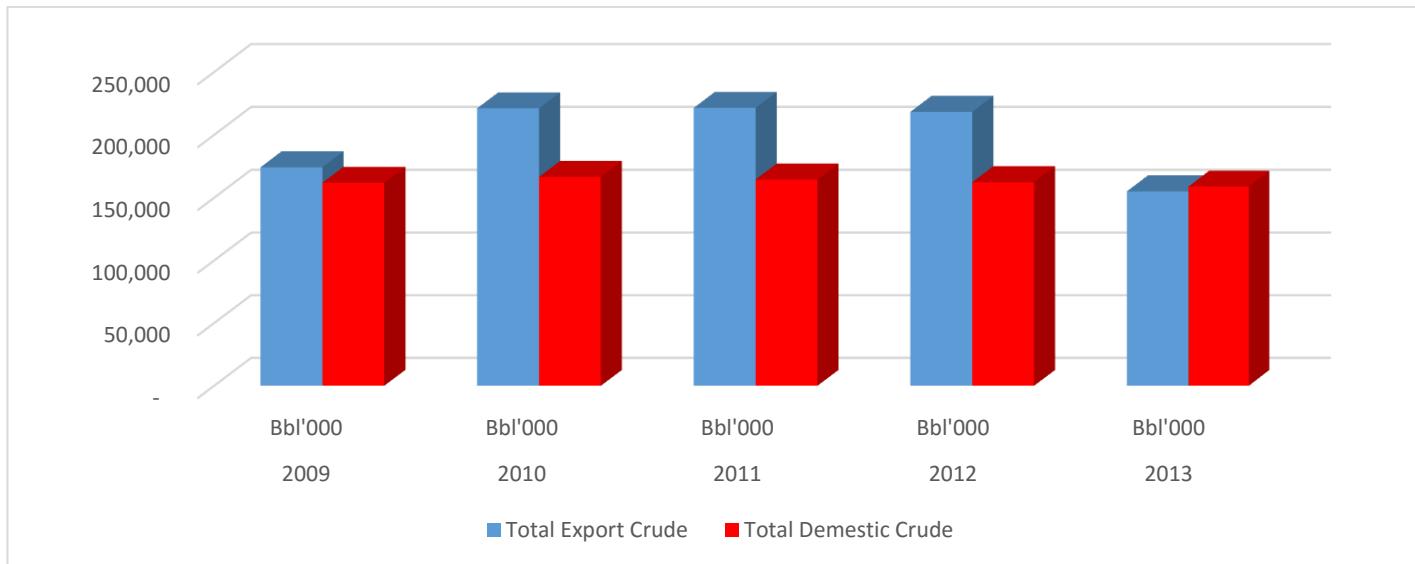
From the validation and reconciliation of NNPC-COMD record of liftings from the various arrangements and sales data on behalf of the Federation, find below summary of trend analysis of validated sales volumes by NNPC-COMD.

Table 3.3.3: Analysis of NNPC-COMD sales volumes on behalf of the Federation as per audit validation

	2009 Bbl'000	2010 Bbl'000	2011 Bbl'000	2012 Bbl'000	2013 Bbl'000
Export Crude Sales					
JV Operations	88,551	127,753	127,810	101,728	52,231
Share of profit from PSC Operations					18,417
Equity from Alternative Funding Arrangement					2,895
Add: Alternative Funding Arrangement	71,163	93,356	93,673	105,602	99,993
	159,714	221,109	221,483	207,330	173,536
Add: Trial Marketing Product (TMP)	14,533	-	-	10,949	-
Sub Total (A)	174,247	221,109	221,483	218,279	173,536
Domestic Crude Sales					
Refinery Delivery	19,363	34,701	45,393	34,927	38,293
Domestic Crude Export	142,551	97,792	39,340	49,214	36,392
Offshore Processing	-	27,337	23,689	22,755	24,665

	2009 Bbl'000	2010 Bbl'000	2011 Bbl'000	2012 Bbl'000	2013 Bbl'000
Product Exchange	-	5,743	56,032	55,447	59,464
Crude Exchange	-	950	-	-	-
Sub Total (B)	161,914	166,523	164,454	162,343	158,814
Total Export and Domestic Volumes (A+B)	336,161	387,632	385,937	380,622	332,350

Figure 3.3.3 - Analysis of NNPC-COMD sales volumes on behalf of Federation as per audit validation



3.3.4 Key Findings from the validation and reconciliation of NNPC Liftings

In the course of carrying out validation and reconciliation of lifting volumes by NNPC-COMD on behalf of the Federation, we noted the following issues:

- i. Aggregate lifting of **7,000,926 barrels** from NAOC JV (Brass crude type) valued at **\$763,405,478.80** was traced to NPDC account.

Implication

As a result of the payment into NPDC account, there was a shortfall in Federation account remittance to the tune of **\$763,405,478.80**.

Recommendation

Federal Government to review the proprietary rights, process and transactions involving the assignment of OMLs from NAOC JV to NPDC by NNPC.

NNPC Response

The proceeds were rightly in NPDC account because OML 60-63 was assigned to NPDC vide DPR letter dated November 15, 2015.

- ii. Aggregate lifting of **1,037,619 barrels** from SPDC JV (Forcados Crude Type) valued at **\$33,209,100** was traced to NPDC account.

Implication

Shortfall in revenue to the federation to the tune of **\$33,209,100**

Recommendation

Federal Government to review the process and transactions leading to the assignment of OMLs from SHELL JV to NPDC.

NNPC Response

The proceeds were rightly in NPDC account because 55% equity in the assets in reference was divested to NPDC vides DPR letter dated March 19, 2013.

The audit did not establish any justification for the assignment of Federation equity in some OMLs previously in the SHELL JV and all the OMLs in NAOC JV to NPDC.

- a) No justification has been provided by NNPC for the transfer, other than the Minister's legal authority to assign and the need for NPDC to develop upstream capacity.
- b) No consideration has been paid to the Federation till date with respect to the OMLs in NAOC JV assigned in December 2012 and neither was the value of the consideration stated in the deed of assignment.
- c) The consideration computed by DPR with respect to the OMLs assigned to NPDC from SHELL JV between 2010 and 2011 was \$1.8 Billion and of this amount, no consideration was paid from the dates of transfer up till April 2014 when the sum of \$100 Million was paid, leaving an outstanding balance of \$1.7 Billion as at the time of reporting.

The assignments of the OMLs were not arm's length transactions and were also undervalued. For instance, the PWC forensic audit report on NNPC in 2014 estimated the value of NNPC's 55% equity

assigned to NPDC to be about \$3.4 Billion based on commercial value paid by third parties on the sale of SHELL's equity (45%) in the same OMLs.

- d) NPDC has continuously enjoyed full rights and benefits accruing from the assets transferred as dictated by the terms of the deed of assignment i.e. Oil and Gas revenue from the assigned fields have been paid to the account of NPDC.
 - e) The NNPC did not declare any surplus to the Federation from the operations of the group since these OMLs were assigned to its subsidiary.
- iii. Lifting of **950,135 barrels** in September from MPN JV (Qua-Iboe Crude Type) valued at **\$105,735,773.48** was also traced to NPDC account, which was later refunded to the Federation account in November as follows: **853,000 bbls** from NPDC Shoreline JV (OML 30) and **96,052 bbls** from Seplat JV valued at **\$103,992,372.90**, leaving a value difference of **\$1,743,400.58**.

Implication

Shortfall in revenue to the federation to the tune of **\$1,743,400.58**

Recommendation

NNPC to account for the sum of **\$1,743,400.58** shortfall

NNPC Response

Efforts are ongoing to pay the balance into Federation Account.

The difference between Total Federation and PPMC lifting volumes of **340.767 Million bbls** in table 3.3.2 (obtained from COMD-COSM records) and total export and Domestic lifting volume of **332.350 Million bbls** in table 3.3.3 (validated from the record of COMD-Revenue and Account) is largely attributable to items i to iii above.

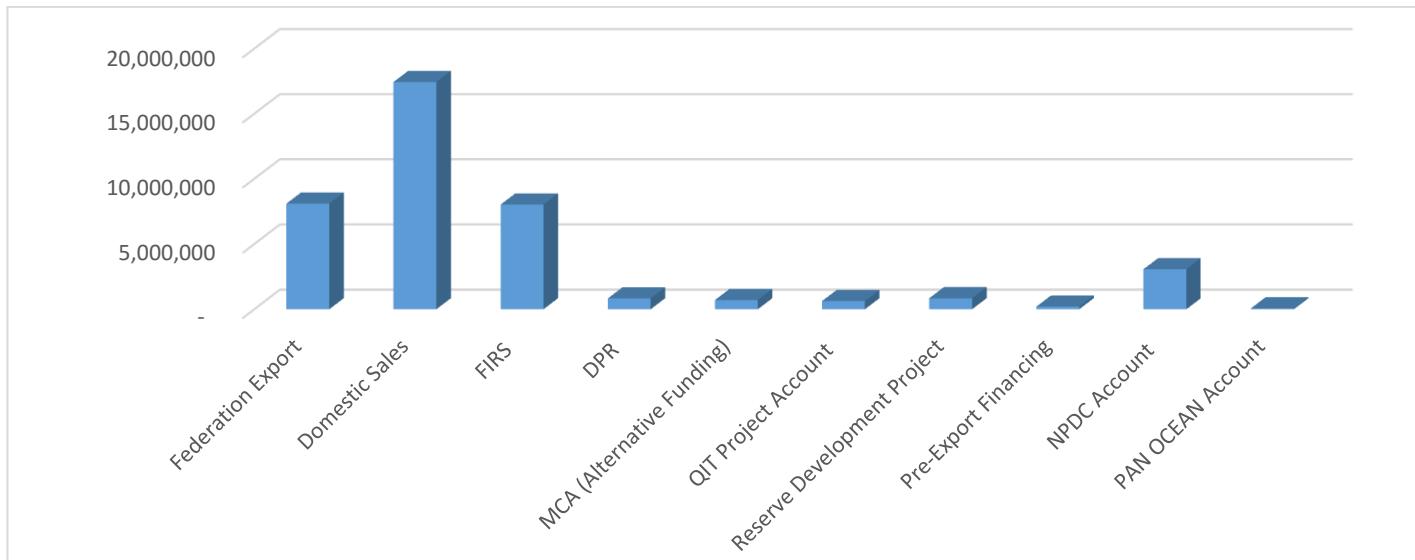
3.3.5 Components of Actual Crude Oil Lifted by NNPC

A summary components of Actual Crude Oil Lifted by NNPC-COMD in 2013 on behalf of the Federation, DPR, FIRS, NPDC, Pan Ocean Debt Servicing and Entities funding MCA is shown in Table 3.3.5A below in comparison with 2012 audit cycle.

Table 3.3.5A Components of Actual Crude Oil Lifted by NNPC

S/N	NNPC Lifting on Behalf of:	2012 Volume Bbls'000	2012 Value \$'000	2013 Volume Bbls'000	2013 Value \$'000
1	Federation Export	81,380	9,115,834	73,543	8,098,883
2	Domestic Sales	162,343	18,147,751	158,814	17,435,818
3	FIRS	88,523	9,871,595	73,236	8,029,264
4	DPR	6,478	718,972	7,722	829,783
5	MCA (Alternative Funding)	11,497	1,129,016	6,453	705,941
6	Satellite Field Development Project Account	6,650	757,826	5,701	628,117
7	Reserve Development Project	-	-	7,648	842,921
8	Pre-Export Financing	-	-	1,799	200,415
9	NPDC Account	35,275	3,975,221	27,680	3,069,188
10	PAN OCEAN Account	716	79,086	593	65,777
11	Trial Marketing Period	9,951	1,053,519	-	-
	TOTAL	402,813	44,848,820	363,190	39,906,107

Figure 3.3.5 - Summary of Components of Crude Oil Lifted by NNPC in value



The Distribution framework of the Revenue Flows amongst the various Beneficiary Accounts is also shown in Table 3.3.5B below.

Table 3.3.5B - Summary of Volume and Value of NNPC Lifting and the Destination Accounts

NNPC Lifting on Behalf of:	2013		Beneficiary Accounts								
	Crude Oil Volume	Crude Oil Value	Direct Federation	FIRS Account	DPR Account	Partners' Account	SFDP Account	RDP Account	Pre-Export Accounts	NPDC Account	Pan Ocean Account
	Bbls'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Federation Export	73,543	8,098,883	8,098,883								
Domestic Sales	158,814	17,435,818	17,435,818								
FIRS	73,236	8,029,264		8,029,264							
DPR	7,722	829,783			829,783						
MCA (Alternative Funding)	6,453	705,941		490,274	134,722	80,946					
Satellite Field Development Project	5,701	628,117					628,117				
Reserve Development Project	7,648	842,921						842,921			
Pre-Export Financing	1,799	200,415							200,415		
NPDC Account	27,680	3,069,188								3,069,188	
PAN OCEAN Account	593	65,777									65,777
Total	363,190	39,906,108	25,534,701	8,519,538	964,505	80,946	628,117	842,921	200,415	3,069,188	65,777

Following from the Validations, Reconciliations and substantive tests carried out on available Records of Crude Oil, issues have been observed with respect to the flows to the individual beneficiary Accounts shown above. The observed issues are as a result of variances between expected flows and actual flows to the destination accounts.

With respect to Federation export crude, the difference between the sums of **\$8.099 Billion** invoiced by NNPC-COMD and actual receipts of **\$7.325 Billion** amounting to about **\$774Million** has been fully accounted for by invoices not yet due for payment (**\$744.754 Million**), first lifting deposit (**\$17.5 Million**), and Credit Notes (**\$11.425 Million**). (See section 3.3.11 for details).

The sum of **\$100.925 Million** was traced to the JP Morgan Chase Crude Oil & Gas Revenue Account with respect to Satellite Field Development Project out of the total amount of **\$628.117 Million** revenue from the project. The balance of **\$527.192 Million** is retained in Proceeds Account in line with loan agreement.

The sum of **\$842.921Million** is the total revenue accrueable from Reserve Development Project in 2013 whereas the sum of **\$300 Million** was the amount to the credit of JP Morgan Chase Crude Oil & Gas Revenue Account from the project. The balance of **\$542.921 Million** is retained in Proceeds Account in line with loan agreement.

3.3.5.1 Key findings on reconciliation of Crude Oil sales values to remittances to the Federation account

The following are Key Findings with respect to the reconciliation of Crude Oil values to remittances to the Federation account.

1. The total domestic Crude Sales valued at **\$17.436 Billion (N2.698 Trillion)** was invoiced by NNPC-COMD, whereas the sum of **\$6.495 Billion (N1.005 Trillion)** was traced to NNPC/CBN Crude Oil Revenue Naira Account. The difference is accounted for as follows:
 - a) Amount not due for payment: **\$3.542 Billion (N548.153Billion)**
 - b) Subsidy approved by PPPRA: **\$5.125Billion (N792.961Billion)**
 - c) Amount outstanding **\$2.274Billion (N351.886Billion)**

Implication

There was a shortfall in Federation account remittance to the tune of **N351.886Billion**.

Recommendation

NNPC to remit the sum of **\$2.274Billion (N351.886Billion)** and ensure strict compliance with the three (3) months period of grace for remittance.

NNPC Response

As at December 2013, total Domestic Crude Oil purchased by NNPC amounted to **₦2,657,209,731,508.19**, out of which **₦1,551,935,625,000** was remitted to Federation Account leaving gross outstanding balance of **₦1,105,274,106,508** (See FAAC report). Of the balance **₦1,105,274,106,508**, PPPRA approved and certified **₦792,961,142,799.52** for 2013 subsidy (See 2013 PPPRA subsidy certificates) and balances of **₦312,312,963,708.67** relate to expenses incurred by NNPC on behalf of the Federation Account and are undergoing Forensic Audit.

- ii. Total sales value of liftings from MCA was **\$705.941 million (6.453 million Barrels)** out of which the sum of **\$134.722 million (1.231million bbls)** was traced to the account of DPR, **\$490.274 million (4.482 million bbls)** to the account of FIRS, while **\$65.561 million (601.569 thousand bbls)** and **\$15.385 million (138.417 thousand bbls)** were said to be for JV Partners' cost Oil and share Oil respectively.

NNPC provided explanation on the entitlement allocation model, but did not make a copy of the model available for audit test and validation of the allocations, citing the need to maintain security, propriety and integrity of data.

Implication

The Federation may be shortchanged from entitlement model or its inappropriate application.

Recommendation

There is need for NNPC to provide complete information necessary for audit in a timely manner. Auditor could be made to sign confidentiality agreement where security, propriety and integrity of data are involved.

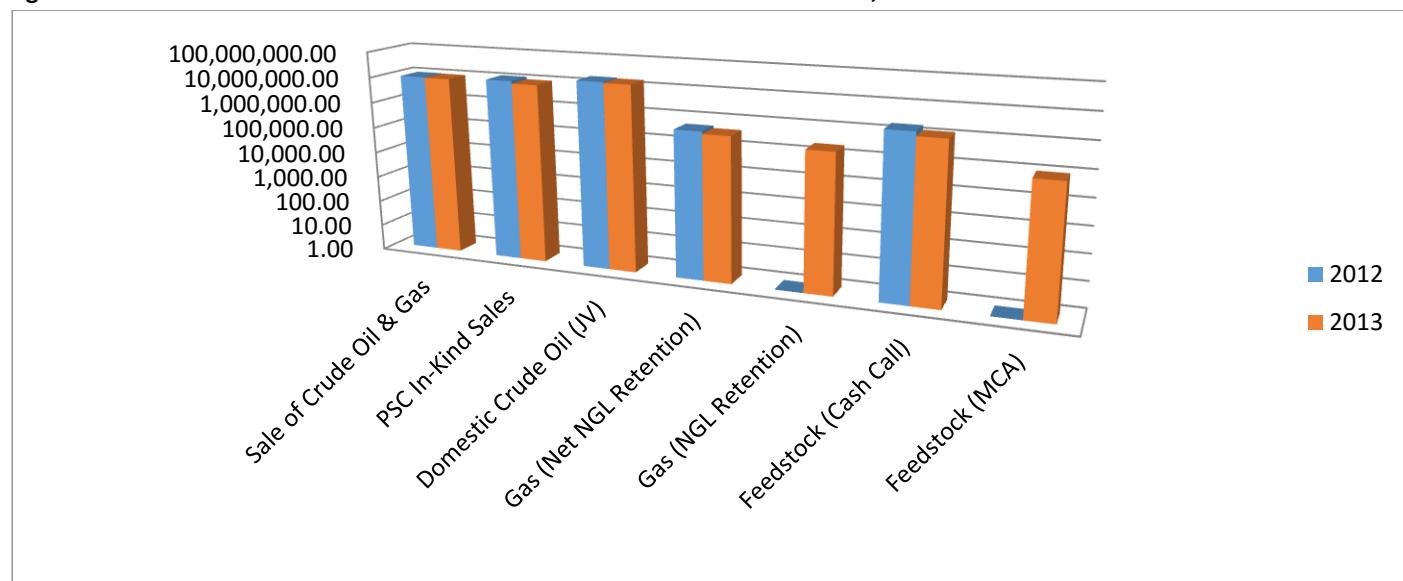
3.3.6 Aggregate Revenue flow from Sale of Government Crude Oil and Gas

From review of NNPC-COMD Populated Template and validation/reconciliation carried out, find below the summary of the Gross Revenue accruable to the Federation from Sale of Crude Oil and Gas in 2013 as compared to that of 2012.

Table 3.3.6 - Gross Revenue flows accruable to the Federation from Crude Oil, Gas and NLNG Feedstock Sales

	2012 \$'000	2013 \$'000
Sale of Crude Oil & Gas:		
Federation Equity & Profit Oil	9,115,834	8,098,883
Satellite Field Development Project (SFDP)	757,826	628,117
Reserve Development Project (RDP)	-	842,921
PSC In-Kind Sales:		
TMP- NNPC Share of Profit Oil	17,944	-
PSC Royalty Oil	718,972	829,783
PSC Tax Oil	9,871,595	8,029,264
MCA Tax Oil (JV Alternative Funding)	888,207	490,274
MCA Royalty Oil (JV Alternative Funding)	240,809	134,722
Total Export Crude Oil	21,611,187	19,053,964
Domestic Crude Oil	18,147,751	17,435,818
Gas (Net NGL 2 Retention)	489,033	364,500
Gas (NGL 2 Retention)	-	251,506
Feedstock (Cash Call)	1,845,370	1,261,396
Feedstock (MCA)	-	96,130
Total Revenue	42,093,341	38,463,314

Figure 3.3.6 - Gross Revenue Flows accruable to the Federation from Crude Oil, Gas and NLNG Feedstock Sales



The table above shows a fall of **8.63%** in Gross Revenue flows accruable to the Federation from Crude Oil, Gas and NLNG Feedstock Sales between 2012 and 2013.

3.3.7 Validation and Reconciliation of Federation Export Crude Sales

Objectives of the Validation and Reconciliation of Federation Export Crude Sales include:

1. The reviewing and confirmation of the Process Flow of Federation Export Crude Sales during the year under review.
2. The confirmation that the Federation Export Crude Sales as per NNPC-COMD Declaration agrees with Source Documents as well as related Records during the year under review.

3.3.7.1 Validation and Reconciliation Requirement

In order to achieve Objectives of the Validation and Reconciliation of Sales of Export Crude Oil, the following documents and information were obtained:

1. Export Crude Oil, Gas and Feedstock Lifting Profile indicating Volume and Value, Receipts and Outstanding – among other details.
2. CBN NNPC JP Morgan Chase Crude Oil and Gas Revenue (Dollar) Account Statement and CBN NNPC JP Morgan Chase Gas Revenue (Dollar) Account Statement.
3. Mandates from NNPC to CBN to sweep funds from JP Morgan Chase Crude Oil and Gas Revenue (Dollar) Account and JP Morgan Chase Gas Revenue (Dollar) Account into the Cash Call Account and the Federation Accounts respectively.
4. Schedule of Gas/Feedstock MCAs Projects.

5. Export Crude Oil, Gas and NLNG Feedstock Sales Invoices together with Bill of Lading, Letters of Credit, and other Related Shipping Documents.
6. DPR Export Reconciliation Data as well as Terminal Receipts Reconciliation Data.
7. NNPC-Company Reconciliation Data.

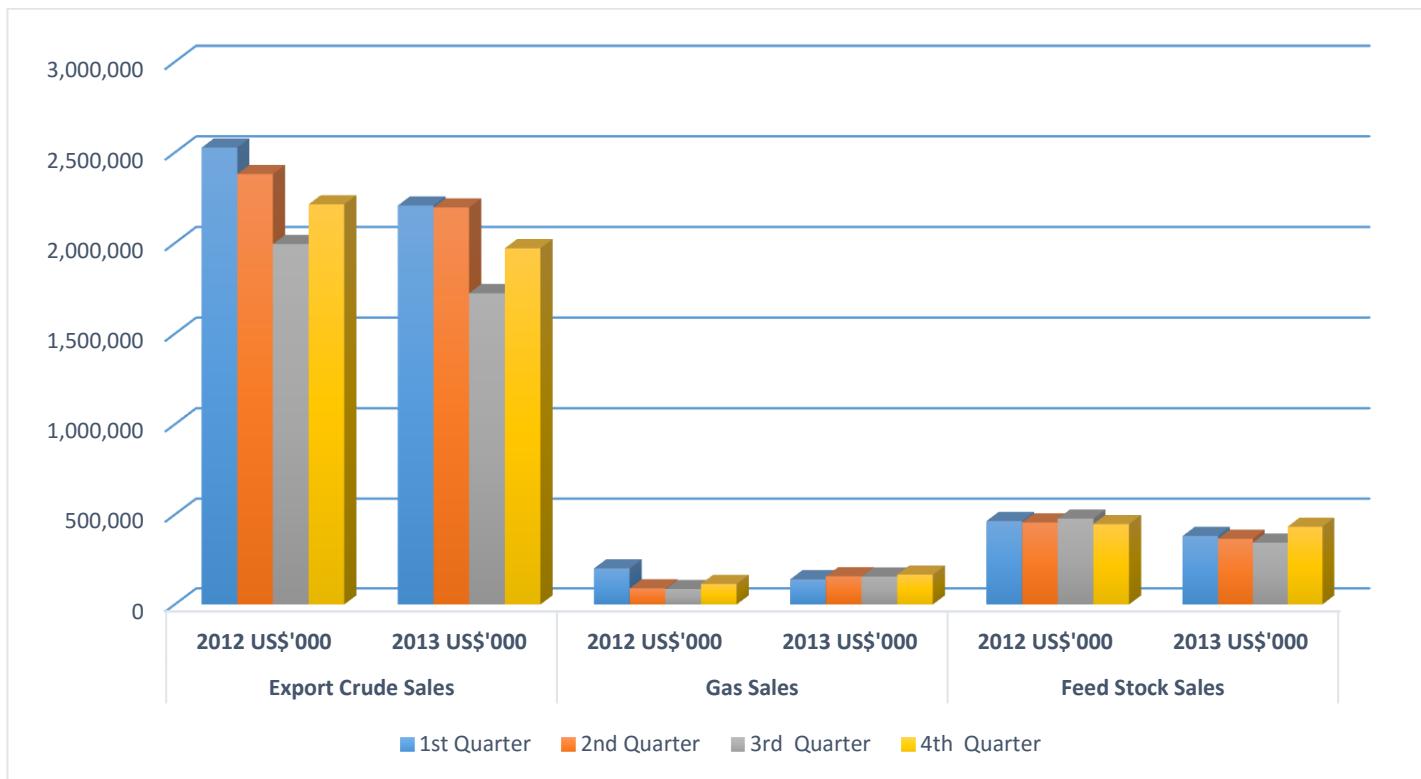
3.3.8 Summary of Export Crude Oil, Gas and NLNG Feedstock Sales Volume and Value

The table below shows a quarterly summary of Export Crude Oil, Gas and NLNG Feedstock sales volume and value for 2013 in comparison with similar values and volumes for 2012.

Table 3.3.8 – Quarterly Comparison of Export Crude Oil, Gas and NLNG Feedstock sales volume and value between 2012 and 2013

Quarters	Export Crude Sales				Gas Sales				Feed Stock Sales			
	2012		2013		2012		2013		2012		2013	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
	Bbl'000	US\$'000	Bbl'000	US\$'000	MT'000	US\$'000	MT'000	US\$'000	MBTU'000	US\$'000	MBTU'000	US\$'000
1 st Quarter	21,049	2,526,705	19,410	2,207,201	231	200,556	210	139,790	183,620	463,729	149,587	380,917
2 nd Quarter	22,478	2,380,587	21,045	2,196,317	150	89,386	244	155,885	177,878	456,725	145,414	365,695
3 rd Quarter	17,989	1,994,704	15,332	1,723,734	122	85,043	219	154,648	193,856	477,456	151,395	344,184
4 th Quarter	19,865	2,213,838	17,756	1,971,630	147	114,047	214	165,683	176,193	447,440	178,026	432,644
Total	81,380	9,115,834	73,543	8,098,883	649	489,032	886	616,006	731,548	1,845,350	624,422	1,523,440

Figure 3.3.8 - Quarterly Comparison of Export Crude Oil, Gas and NLNG Feedstock sales volume and value between 2012 and 2013



The analysis above shows generally lower volumes and corresponding values in 2013 when compared to those of 2012, except for Gas volume and sales value, which showed an improvement in 2013

3.3.9 Export Crude Oil, Gas and Feedstock Receivables Control Account

We have reviewed the NNPC-COMD Populated Template with available corroborating documents and have prepared the following control accounts for Export Crude Oil, Gas and Feedstock Receivables summarising the entire Transactions and Payments received for the year under review.

Table 3.3.9A - Export Crude Oil, Gas and Feedstock Receivables Control Account as at 31st December

	2012			2013		
	\$000	\$000	\$000	\$000	\$000	\$000
Balance as at 1st January (A)			1,602,424			1,499,914
Add: Sales						
(Ai)- Crude Oil Sales						
Crude oil liftings - Federation	9,115,834			8,098,883		
Satellite Field Development Project	757,826			628,117		
Reserve Development Project				842,921		
TMP - NNPC Share of Profit	17,944					
Net Debit Notes	277					
Less: First Lifting Deposit	-			(17,500)		
Less: Credit Notes	(68)	9,891,812		(11,425)	9,540,996	
(Aii)- Gas Sales	489,033			616,006		
(Aiii)- Feedstock Sales	1,845,370			1,523,440		
	2,334,402			2,139,446		
Less: Spiking Cost				(1,259)		
Exchange Loss				(1,167)		
Credit Notes	(825)	2,333,577		(772)	2,136,248	
Total Sales for the Year (B)			12,225,389			11,677,244
Total Receivables (C= A+B)			13,827,813			13,177,158
Less: Receipts						
Receipts into:						
JP Morgan Crude Oil and Gas Revenue (Dollar) Account		9,959,280			8,094,476	
Classified Other Income- SFDP					100,925	
RDP					300,000	
JP Morgan Gas Revenue (Dollar) Account:						
Gas & Feedstocks Prior Year Outstanding Receipt				161,200		
Gas Sales Receipt	170,628			271,316		
NGL 2 Revenue Account price balance Receipt	39,559			109,780		
Feedstock and other Gas Receipts	1,679,712	1,889,899		1,095,658	1,637,954	
NGL 2 Revenue Account Receipt	266,879			251,506		
Less: Price balance paid into JP Morgan Gas Revenue Account	(39,559)	227,320		(109,780)	141,726	
Feedstock Escrow Account (MCA) Receipt		251,400			225,515	
Feedstock Escrow Account(NDPR) Receipt					4,342	
SFDP proceeds account					527,192	
RDP proceeds account					542,921	
Total Receipts (D)			12,327,899			11,575,051
Outstanding balance as at 31st December (E= C-D)			1,499,914			1,602,107
Balance as at 31st December (As Per NNPC Record)			(910,651)			(1,162,391)
Un-explained Difference			589,263			439,715

Balance as per Audit validation is \$1,602,107,000 as at 31st December 2013 while the NNPC record revealed \$1,162,391,000, which gives a difference of \$439,715,000. The details of this difference are analysed below.

Table 3.3.9B - Detailed Analysis and Reconciliation of the Balance as of 31st December

	2012	2013
	\$000	\$000
Balance as at 1st January	1,602,424	1,499,914
Add: Total Liftings after deducting Credit Notes & First Lifting Deposit	12,207,445	11,677,244
	13,809,869	13,177,158
Less: Receipts during the Year	12,309,956	11,575,051
Oustanding Balance as at 31st December	1,499,914	1,602,107
Less: NNPC Outstanding Balance as at 31 December	(910,651)	(1,162,391)
Difference	589,263	439,715

Reconciliation of Export Crude Oil and Gas Recievable Control Account

	2012	2013
	\$000	\$000
Opening Balance as at 1st January per previous NEITI Audit Report	1,602,424	1,499,914
Crude Oil sales not due for payment in the Current Year	771,772	744,754
Gas and Feedstock sales not due for payment in the Current Year	146,719	262,613
Feedstock Sales Invoice due in December but unpaid		25,299
First lifting deposit on invoice No COS/02/025/12 paid per NNPC response	2,500	
FIRS Account	105,548	
Feedstock sales invoice in November 2012 but paid in January 2013	21,597	
Exchange Losses	1,036	
Soku condensate	2,845	
Crude Oil payment as Tech Cost	9,012	
Bank charges	1	
Debt Servicing receipt from Pan Ocean	(2,000)	
Crude Oil sales (part) for November 2011 paid into JP Morgan Crude Oil and Gas Revenue (Dollar) Account in January 2012	(101,492)	
Part Crude Oil sales for December 2011 paid into JP Morgan Crude Oil and Gas Revenue (Dollar) Account in January 2012	(751,556)	
The balance portion of Crude Oil sales for December in prior year paid into JP Morgan Crude Oil and Gas Revenue (Dollar) Account in Current year	(101,253)	(769,272)
Gas Sales (part sales) for prior year paid into JP Morgan Gas Revenue (Dollar) Account in Current year	(1,898)	(161,200)
Feedstock Sales (part sales) for November 2011 paid into JP Morgan Gas Revenue (Dollar) Account in January 2012	(67,312)	
Feedstock Sales (part sales) for December 2011 paid into JP Morgan Gas Revenue (Dollar) Account in February 2012	(65,851)	
Gas Sales (part sales) for November and December 2011 paid into JP Morgan Gas Revenue (Dollar) Account in February 2012	(26,991)	
Gas Sales paid into NGL 2 Revenue Account	(2,968)	
Gas Sales in November and December 2011 - 61% of sales paid into NGL 2 Revenue Account	(42,217)	
	1,499,914	1,602,107

The outstanding sales receivable from Crude Oil and gas as at 31st December 2012 is **\$1.499914 Billion** and this includes the sum of **\$940.083 Million** not due in 2012 and made up of the following:

- a) **\$771.772 Million** Crude Oil sales
- b) **\$146,719 Million** Gas and Feedstock sales

c) **\$21.592 Million** Feedstock sales invoiced in November

However, only the sum of **\$930.472 Million** from the amount not due in 2012 (consisting of **\$769.272 Million** and **\$161.200 Million** in Table 3.3.9B above) could be traced to JP Morgan Chase Crude Oil and Gas Revenue Accounts and JP Morgan Chase Gas Revenue Accounts in 2013.

In addition to above, Audit validation revealed that the total outstanding amount receivable as at December 2013 stood at **\$1.602 Billion**, whereas **\$1.162 Billion** was recorded by NNPC as sales receivable, which results to an un-reconciled difference of **\$439.715Million**.

3.3.9.1 Key findings on Export Crude Oil, Gas and Feedstock Receivables Control Account

- a) NNPC records of revenue receivable are not consistent with the underlying records of sales transactions and NEITI audit reports.
- b) Some of the Crude Oil and Gas Traders did not comply with the 30 days credit rule for remittance to the designated revenue accounts.
- c) Loss of time value of money as a result of late remittance.

Implication

There is under reporting of revenue receivable, which may result in revenue losses to the tune of **\$439.715Million**.

Recommendations

- a) NEITI to ensure reconciliation with NNPC to arrest the yearly build-up of un-reconciled balances and consequent loss of revenue due to the Federation.
- b) NNPC to ensure strict compliance with the 30 days credit rule for revenue remittance.

3.3.10 Summary of Payments Received into JP Morgan Crude Oil and Gas Revenue Accounts

A review and validation of NNPC-COMD Federation Crude Oil Sales record template along with the CBN - NNPC JP Morgan Chase Crude Oil and Gas Revenue (Dollar) Account Statement was carried out and Table 3.3.10 below provides the summary of the payments made into the JP Morgan account for the year under review.

Table 3.3.10 - CBN-NNPC JP Morgan Chase Crude Oil and Gas Revenue (Dollar) Account

		2012 \$'000	2013 \$'000
Balance as at 1st January	(A)	1,211,924	923,816
Lodgements:			
Export Crude Proceeds- Prior Year			769,272
Export Crude Proceeds- Current year		9,959,280	7,325,204

Interest and Other Classified Lodgements		170,653	622,733
Total Lodgements during the year	(B)	10,129,933	8,717,209
Total Inflow	(A+B)=C	11,341,857	9,641,025
Payments:			
Payment to Federation Account		3,162,077	2,045,347
Transfer to JV Cash call Account		7,255,964	7,012,280
Total Outflow	(D)	10,418,041	9,057,627
Balance as at 31st December		923,816	583,398

The table above shows the reconciliation of Crude Oil Sales Proceeds with the Sales Invoices as well as the prior year's balances. The sum of **\$622.733 Million** represents Interests and other classified lodgements, which were grouped as Other Miscellaneous Receipts in the populated template, received from NNPC-COMD

3.3.10.1 Key findings on payments received into JP Morgan Crude Oil and Gas revenue Account

The sum of **\$622.733 Million** was classified as Miscellaneous lodgments, out of which **\$114.123 Million** relates to transactions described by NNPC as Insurance Claims, Receipts from P. Exploration Nigeria Limited, MPN JV, SPDC JV, CNL JV, Sterling Oil, Azenith Energy Resources, FBN, TEPNG Usan, Trial Marketing. NNPC was to provide further explanations on the transactions in view of the huge amounts involved but has not provided this.

Implication

The audit was not able to obtain details nor ascertain the basis for the transactions relating to **\$114.123 Million** as specified above.

Recommendation

NNPC to provide futher details and relevant source documents with respect to the transactions classified as Miscellaneous Lodgments to enable further reconciliations and validations

3.3.11 Analysis of variance between Export Crude Oil and Actual Sales Receipts

An analysis of actual crude oil sales in comparison with lodgements into JP Morgan Chase Crude Oil & Gas Revenue (Dollar) Account reveals variances contained in the table below.

Table 3.3.11 Monthly Analysis of Export Crude Oil Sales Volume and Value and amount received into the JP Morgan Crude Oil and Gas Revenue (Dollar) Account

Month of Lifting	Volume	NNPC/COMD Sales Value	CBN Receipts	Variance	Credit Notes	First Lifting Deposit	Undue & Unpaid	Total
	Bbl'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
January	9,667	1,117,102	778,923	338,180	390	2,500		2,890
February	4,872	558,455	782,161	(223,706)	992	2,500		3,491
March	4,871	531,644	630,201	(98,557)	7,036	2,500		9,536
April	4,976	514,168	506,609	7,559	59	7,500		7,559
May	9,178	951,871	957,482	(5,611)	1,435	2,500		3,935
June	6,891	730,278	676,661	53,617	1,410	-		1,410
July	5,907	658,048	710,256	(52,208)	-	-		-
August	6,072	690,954	588,896	102,058	-	-		-
September	3,353	374,733	359,915	14,817	65	-		65
October	3,054	341,607	341,568	39	39	-		39
November	7,078	777,800	992,533	(214,733)	-	-		-
December	7,624	852,223		852,223			744,754	744,754
Total	73,543	8,098,883	7,325,204	773,679	11,425	17,500	744,754	773,679

The table above shows the total sum of **\$8.099 Billion** as the amount invoiced by NNPC-COMD for export crude oil and the actual receipts of the sum of **\$7.325 Billion** was traced to JP Morgan Chase Crude Oil & Gas Revenue Account. The variance of **\$773.679 Million** was reconciled and accounted for as follows:

- I. **\$11.425 Million** was Credit Notes (That is, Customers claim for demurrage or cargo loss as the case may be) to reduce invoice payable by the Customers
- II. **\$17.5 Million** was as offset for First Lifting Deposit
- III. **\$744.754 Million** as Invoices that were not yet due for payment in 2013.

3.3.12 Summary of Payments Received into JP Morgan Gas Revenue Accounts

A review and validation of NNPC-COMD Federation Gas/Feedstock Sales record template along with the CBN -NNPC JP Morgan Chase Gas Revenue (Dollar) Account Statement was carried out and Table 3.3.12 below provides the summary of the payments made into the JP Morgan account for the year under review.

Table 3.3.12 - CBN-NNPC JP Morgan Chase Gas Revenue (Dollar) Account

		2012 \$'000	2013 \$'000
Balance as at 1st January	(A)	284,025	207,994
Lodgments:			
Gas & Feedstock Proceeds -Prior Year			161,200
Gas & Feedstock Proceeds- Current Year		1,889,899	1,366,974
Interest and Other Classified Lodgments		213,027	307,833
Total Lodgment during the year	(B)	2,102,926	1,836,008
Total Inflow	(A+B)=C	2,386,951	2,044,002
Payments:			
Payment to Federation Account		2,124,060	1,467,655
Transfer to JV Cash call Account		54,897	265,070
Total Outflow	(D)	2,178,957	1,732,725
Balance as at 31st December		207,994	311,277

3.3.13 Analysis of Gas value variances with actual Sales Receipts

An analysis of the validated NNPC-COMD Sales values compared to actual Gas receipts into JP Morgan Chase Gas Revenue (Dollar) Account was carried out. Table 3.3.13 below gives a summary of the observed variances between actual Sales and receipts for the year under review.

Table 3.3.13 - Monthly Analysis of Gas Sales Volume and Value

Month of Sales	Volume	NNPC /COMD Sales Value	CBN Receipts		Variance	Gas Escrow Account	Undue & Unpaid Invoice	Exchange loss	Total
			Direct from Traders	NGL 2 price balance					
MT'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
January	106	76,411	14,768	28,365	33,277	(28,365)			(28,365)
February	30	15,195	39,236		(24,041)	37,602			37,602
March	74	48,184	13,979		34,205	-			-
April	74	45,750	27,398		18,352	20,865		119	20,984
May	95	65,393	26,491		38,902	41,434		322	41,756
June	75	44,742	14,677	18,892	11,173	(16,187)			(16,187)
July	-	-	21,871		(21,871)	34,208			34,208
August	113	79,043	14,699	-	64,344	-		526	526
September	106	75,605	39,619		35,985	40,844		200	41,044
October	101	73,665	21,154		52,511	37,607			37,607
November	7	6,152	37,424		(31,272)	36,241	6,152		42,393
December	106	85,866		62,522	23,344	(62,522)	85,866		23,344
Total	886	616,006	271,316	109,780	234,911	141,726	92,018	1,167	234,911

The table above shows the total value of Gas in the sum of **\$616.006 Million** invoiced by NNPC-COMD and a net Receipts of **\$381.095 Million**, consisting of **\$271.316 Million** (Direct transfer from traders) and **\$109.780**

Million (NGL 2 price balance) traced to JP Morgan Chase Gas Revenue Account. The variance of **\$234.911 Million** is accounted for as follows:

- I. **\$141.726 Million** as Retention in Gas Escrow Account
- II. **\$92.018 Million** not due for settlement as at 31st December, 2013
- III. **\$1.167 Million** exchange losses.

3.3.13.1 Key findings on Gas sales value and Receipt variances

There was an exchange loss in Gas transactions to the tune of **\$1.167 Million**

Implication

There was a shortfall in remittance to the Federation account in the sum of **\$1.167 Million** resulting from exchange losses in the year 2013.

Recommendation

NNPC to ensure that payments are made in the currency of transaction and currency conversions are also made at the prevailing CBN rates.

NNPC Response The transactions are in accordance with the Agreement and approval.

3.3.14 Analysis of NLNG Feedstock value variances with actual Sales Receipts

An analysis of the validated NNPC-COMD Sales values compared to actual NLNG Feedstock receipts into JP Morgan Chase Feedstock Revenue (Dollar) Account was carried out. Table 3.3.14 below gives a summary of the observed variances between actual Sales and receipts for the year under review.

Table 3.3.14 - 2013 Analysis of NLNG Feedstock

Month of Sales	Volume	NNPC/COMD Sales Value	CBN Receipts	Variance	NDPR Escrow	Credit Note	Spiking Cost	Undue & Unpaid Invoice	Due & Unpaid Invoices	MCA Escrow Account	Total
	MBTU'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
January	62,279	152,611	126,677	25,934	-	647				25,287	25,934
February	38,655	113,539	100,133	13,406	526	125				12,755	13,406
March	48,653	114,767	91,738	23,028	518					22,511	23,028
April	54,489	146,352	80,744	65,608	498					26,318	26,816
May	47,871	109,087	130,118	(21,031)	482		169			17,109	17,760
June	43,054	110,256	93,355	16,902	358		564			15,980	16,902
July	31,432	73,705	62,321	11,384	264		140			10,981	11,384
August	64,232	149,448	123,198	26,250	449		229			25,572	26,250
September	55,731	121,031	101,314	19,717	386					19,332	19,717
October	58,126	142,310	113,258	29,052	449		158			28,445	29,052
November	53,416	119,740	72,803	46,936	411					21,227	21,638
December	66,484	170,595		170,595				170,595	25,299		195,894
Total	624,422	1,523,440	1,095,658	427,782	4,342	772	1,259	170,595	25,299	225,515	427,782

The total sum of **\$427.782 Million** in the above table represents the variance between sales value and actual proceeds and the sum was accounted for as follows:

- i. **\$4.342 Million** as first line transfer to NDPR Escrow Account
- ii. **\$0.772 Million** credit notes
- iii. **\$1.259 Million** Spiking/handling cost
- iv. **\$170.595 Million** representing invoices not due for settlement in 2013
- v. **\$255.515 Million** as transfer to MCA Escrow account
- vi. **\$25.299 Million** as amount due and unpaid as at 31st December 2013

3.3.14.1 Key Findings on NLNG Feedstock sales value and Receipt variances

- a) The sum of **\$25.299 Million** was due and unpaid as at 31st December 2013.
- b) NNPC did not provide statements of Escrow account for reconciliation and validation of transactions while NDPR could also not confirm the transaction.

Implication

- a) There was a shortfall in remittance to the Federation account in the sum of **\$25.299 Million** in the year 2013 resulting from unpaid but due invoices as at 31st December 2013
- b) Loss of time value of money due to late payment

Recommendation

- a) NNPC to ensure strict compliance with the 30 days credit period and collection of late payment penalty from the defaulting Customers.

3.3.15 Reconciliation of Export Crude Oil, Gas and Feedstock Sales per Audit Validation against NNPC Analysis

Table 3.3.15 - Reconciliation of Monthly Crude Oil and Gas/ Feedstock Sales per Audit against NNPC Analysis for 2013

Reconciliation	Export Crude Oil Sales		LPG/NGL (Gas)	NLNG (Feedstock)
	Volume	Value	Sales Value	Sales Value
			\$'000	\$'000
As Per NNPC Analysis	74,542	8,205,538	616,006	1,523,440
As Per Audit	73,543	8,098,883	616,006	1,523,440
Difference	999	106,655	0	0

The difference shown in the table above is as a result of INVOICE NO FIRS/06/052/2013 bearing lifting value and volume of **999,006 BBL and \$106,654,879.57** respectively that was erroneously paid into NNPC/CBN JP Morgan Chase Oil and Gas Revenue Account by the Customer.

The volume was lifted on behalf of FIRS and the Audit has included this amount in FIRS lifting schedule.

3.3.15.1 Key finding on NNPC analysis of export crude oil sales

NNPC included the FIRS lifting of 999,006 bbl valued at **\$106,654,879.57** to the federation cargo

Implication

Overstatements of export crude oil sales and understatement of PSC PPT

Recommendation

NNPC should give mandate for the reversal of such transactions whenever they occur for proper accountability.

3.3.16 Validation and Reconciliation of Domestic Crude Oil Sales Volume and Value

Objectives of the Validation and Reconciliation of Domestic Crude Oil Sales Volumes and Value include:

1. To confirm the Volume of Domestic Crude Oil actually invoiced by NNPC-COMD to NNPC-PPMC, the subsidiary of NNPC responsible for handling domestic crude oil activities.
2. To confirm that Domestic Crude Oil supplied to NNPC-PPMC during the year under review were promptly and correctly paid for by NNPC-PPMC and the payments traced and agreed to the NNPC/CBN Crude Oil Sales (Naira) Account.
3. To validate NNPC mandates to CBN and confirm that proceeds from Domestic crude oil sales were swept into the Federation Account.
4. To report on lapses observed in the marketing and sale of domestic crude during the year under review.

In order to achieve the objectives of the Validation and Reconciliation of Domestic Crude Oil Sales Volume and Value during the year under review, the under listed Documents and Information were obtained from the NNPC-COMD, Treasury and Accounts Department as well as Covered Entities.

1. Domestic Crude Oil Sales Invoices and Shipping Documents.
2. Populated Domestic Crude Lifting Profile.
3. CBN/NNPC Crude Oil and Gas Naira Account Statements.
4. NNPC mandate values for sweepings into Federation Account.

3.3.17 Monthly Analysis of Domestic Crude Sales Volumes and Values (Dollar Equivalent) for 2013

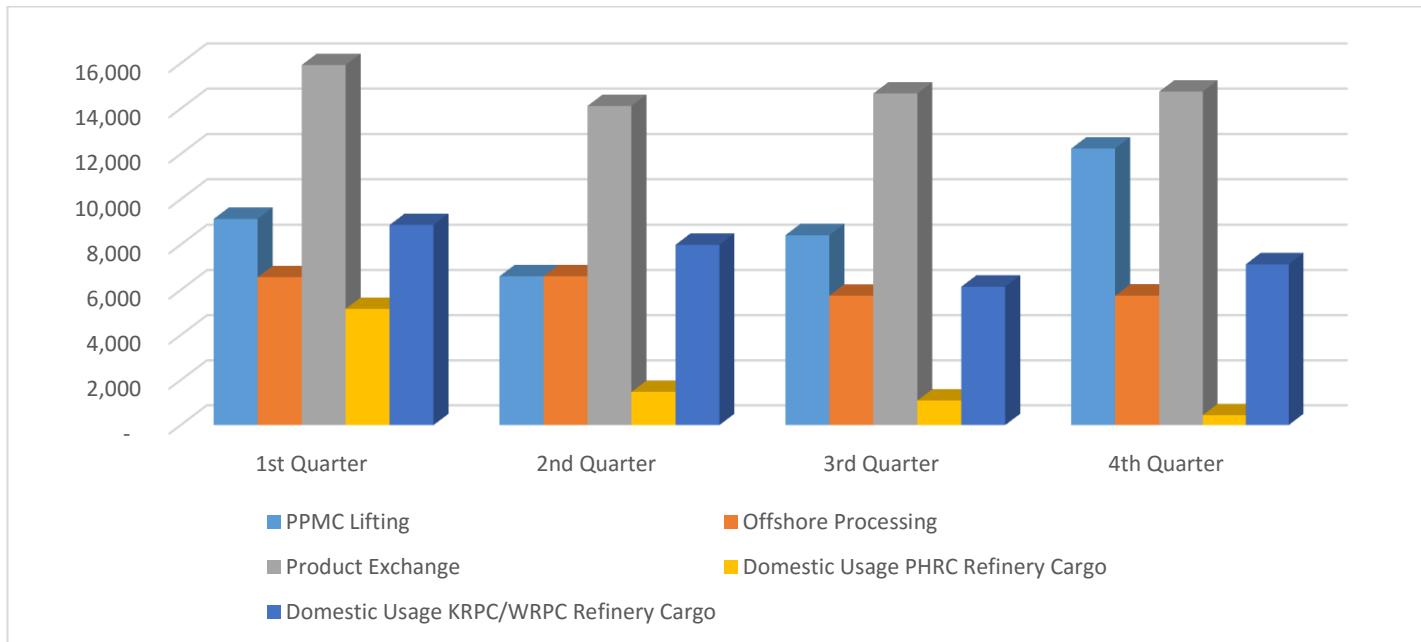
Table 3.3.17 below shows the result of verification of volume and value of Domestic Crude in the template populated by NNPC-COMD, the Lifting/Sales Profile against the records of COSM Department of NNPC in order to ensure that all domestic sales transactions were correctly accounted for and fully reported.

Table 3.3.17 - Monthly Analysis of Domestic Crude Sales Volumes and Values (Sales Receivables) for 2013

	PPMC Lifting		Offshore Processing		Product Exchange		Domestic Usage PHRC Refinery Cargo		Domestic Usage KRPC/WRPC Refinery		Total Sales	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
	bbls'000	US \$'000	bbls'000	US \$'000	bbls'000	US \$'000	bbls'000	US \$'000	bbls'000	US \$'000	bbls'000	US \$'000
January	3,612	418,667	2,805	324,501	6,475	743,809	3,297	378,856	3,366	384,961	19,553	2,250,794
February	949	106,892	1,899	214,809	2,806	320,246	1,106	126,482	3,318	380,687	10,078	1,149,117
March	4,574	499,754	1,857	196,474	6,644	719,847	760	82,124	2,183	232,640	16,018	1,730,840
1st Quarter	9,135	1,025,314	6,560	735,784	15,924	1,783,902	5,163	587,462	8,867	998,289	45,649	5,130,751
April	1,899	193,295	1,856	189,076	2,805	285,762	807	81,819	2,809	289,803	10,177	1,039,755
May	2,850	300,109	950	100,092	5,705	601,124	623	65,628	2,127	225,537	12,255	1,292,491
June	1,853	195,281	3,800	399,314	5,612	589,192	42	4,367	3,054	322,222	14,361	1,510,377
2nd Quarter	6,602	688,685	6,606	688,483	14,121	1,476,078	1,472	151,814	7,991	837,563	36,792	3,842,622
July	1,848	199,261	2,898	316,086	4,708	517,066	86	9,519	2,619	290,482	12,159	1,332,413
August	2,485	284,825	950	109,867	5,701	644,703	565	65,095	2,136	240,478	11,837	1,344,968
September	4,082	455,539	1,900	210,438	4,259	477,496	439	48,792	1,387	154,789	12,066	1,347,055
3rd Quarter	8,416	939,625	5,748	636,391	14,668	1,639,265	1,090	123,406	6,142	685,749	36,063	4,024,436
October	3,785	413,597	1,901	207,340	4,386	481,894	74	8,234	2,790	308,796	12,937	1,419,861
November	3,935	437,584	1,924	210,224	4,753	520,500	209	23,508	2,666	296,305	13,486	1,488,122
December	4,520	499,945	1,925	209,219	5,612	618,736	156	17,158	1,672	184,968	13,886	1,530,026
4th Quarter	12,239	1,351,126	5,750	626,783	14,752	1,621,130	440	48,901	7,129	790,068	40,309	4,438,009
Total	36,392	4,004,749	24,665	2,687,441	59,464	6,520,375	8,164	911,583	30,128	3,311,669	158,814	17,435,818

The quarterly lifting volumes for each of the domestic crude arrangements is comparatively shown in Figure 3.3.17 below:

Figure 3.3.17 Quarterly Analysis of Domestic Crude Sales Volumes and Values (Sales Receivables) for 2013



From the above Table, the total volume of Domestic Crude oil lifted by NNPC-COMD for NNPC-PPMC was **158.814 Million barrels** valued at **\$17.436 Billion**. This position was corroborated from the records of COMD-COSM and DPR records as against NNPC-COMD lifting profiles which recorded **154.796 Million barrels valued at \$16.996 Billion** in the year under review.

The difference of about **\$440 Million, which was accounted for by NNPC in September 2014**, is included in the value of domestic Crude Oil due but not paid amounting to **\$2.274Billion (N351.886Billion)** mentioned in Section 3.3.5.1 above. The details of un-accounted lifting transactions are presented in **Appendix 3.3.17** to this report.

3.3.17.1 Key findings on Domestic Crude Sales Volume and Value

Aggregate lifting of **4,017,839 bbl** Valued at **\$439,853,712.95 (N68,065,150,673.36)** allocated to refinery from Forcados Terminal between the periods of May to December 2013 was not accounted for by NNPC-COMD in the year under review.

Implication

1. Shortfall in remittance to the Federation account in the sum of **\$439,853,712.95 (N68,065,150,673.36)** in the year under review.
2. From economic perspective, the Federation may have lost **N7.02 Billion**, considering the time value of investing the amount due within the period of default at CBN-MPR interest rate of **12%**. Audit

review could not confirm any evidence of late payment penalty made by NNPC as in the case with Off-takers.

Recommendation

1. NNPC should always ensure compliance with the 90 days credit period

NNPC Response

The volume in question was part of Refinery deliveries from Ugheli (OML 34) between May, 2013 and June, 2014. Though the deliveries were made in 2013, the cargoes could not be valued and accounted for by COMD because shipping documents for those cargoes were not provided by the Terminal. However, the shipping documents were later provided in September, 2014 and the cargoes had since been valued accordingly.

3.3.18 Monthly Analysis of Domestic Crude Oil Sales Value conversion to Naira Equivalent

A Monthly Analysis of Domestic Crude Oil Sales value conversion from Dollar to Naira Equivalent at the appropriate CBN advised conversion rate is shown in Table 3.3.18 below.

Table 3.3.18 - Monthly Analysis of Domestic Crude Oil Sales Volumes and Values in Naira Equivalent

Month	Volume bbls'000	Value \$'000	Conversion Rate	Value N'000
January	19,553	2,250,794	154.77	348,355,377
February	10,078	1,149,117	154.74	177,814,385
March	16,018	1,730,840	154.75	267,847,551
1st Quarter	45,649	5,130,751		794,017,312
April	10,177	1,039,755	154.74	160,891,661
May	12,255	1,292,491	154.75	200,012,977
June	14,361	1,510,377	154.75	233,730,791
2nd Quarter	36,792	3,842,622		594,635,428
July	12,159	1,332,413	154.76	206,204,207
August	11,837	1,344,968	154.75	208,133,823
September	12,066	1,347,055	154.76	208,470,160
3rd Quarter	36,063	4,024,436		622,808,190
October	12,937	1,419,861	154.73	219,695,075
November	13,486	1,488,122	154.70	230,212,402
December	13,886	1,530,026	154.73	236,740,970
4th Quarter	40,309	4,438,009		686,648,447
Total	158,814	17,435,818		2,698,109,378

3.3.19 Domestic Crude Oil receivable Control Account for the year ended 31st December 2013

Following from the review of NNPC-COMD records and documents, which includes Sales Invoices, Shipping documents, Bank Statements and various Mandates, find below the Analysis of Domestic Crude Receivable Control Account for the year under review:

Table 3.3.19A - Domestic Crude Receivable Control Account for the year ended 31st December 2013

	N'Billion
Opening balance at 1st Jan 2013	2,256.17
Add:	
Cost of Crude Supplied to NNPC	2,698.11
Total Receivable (A)	4,954.27
Less:	
Subsidy Deductions *	138.49
Payment to Federation Account	1,466.95
Total Payments (B)	1,605.44
Balance due to Federation Account as at 31st December, 2013(A-B)	3,348.84

Table 3.3.19B - Analysis of the constituents of the outstanding balance at the year ended 31st December 2013

	N'Billion
Outstanding as at 1st January, 2013	2,256.17
Payment for Sep-2012 lifting	(112.40)
Payment for Oct-2012 lifting	(112.54)
Payment for Nov-2012 lifting	(109.33)
Payment for Dec-2012 lifting	(127.19)
Unpaid January-2013 lifting	165.97
Unpaid February-2013 lifting	65.43
Unpaid March-2013 lifting	155.46
Unpaid April-2013 lifting	55.70
Unpaid May-2013 lifting	83.63
Unpaid June-2013 lifting	111.33
Unpaid July-2013 lifting	93.80
Unpaid August-2013 lifting	66.17

	N'Billions
Unpaid September-2013 lifting	208.47
Amount not yet due for settlement in 2013	548.15
Outstanding as at 31st December, 2013	3,348.84

Table 3.3.19C - Analysis of the constituents of the outstanding balance at the year ended 31st December 2013

Summary of the above analysis	N'Billions
Outstanding from previous years	1,794.71
Unpaid 2013 invoices	1,005.98
Outstanding not due for settlement	548.15
Total	3,348.84

*Note that the total subsidy approved for NNPC by PPPRA in 2013 is **N792, 961,142,799.52**, but subsidy deducted at source by NNPC is **N 138,487,103,205.59**

The details of the above transactions on monthly basis are presented in **Appendix 3.3.19** to this report.

Table 3.3.19A shows the total domestic crude oil sales value at **N2.698 Trillion**, which is accounted for as follows:

- Amount not due for payment in the sum of **N548.152Billion (\$3.542 Billion)**
- Subsidy approved by PPPRA was **N792.961Billion (\$5.125Billion)**
- Amount remitted to NNPC/CBN Crude Oil Revenue Naira account amounting to **N1.466 Trillion** (which includes **N461.46 Billion** prior year receivables and **N1.005 Trillion** or **\$6.495 Billion** for settlement of 2013 invoices)
- Amount outstanding **N351.886Billion (\$2.274Billion)**

3.3.19.1 Key findings on Domestic Crude Sales outstanding as at 31st December, 2013

The total amount receivable from NNPC-PPMC as at 31st December 2013 stood at **N3.349 Trillion** as shown in Table 3.3.19C above and the components of this amount are:

- The sum of **N1.795 Trillion** outstanding from previous years
- The sum of **N1.006 Trillion (\$6.527 Billion)** that was due and unpaid for the year 2013
- The sum of **N548.153 Billion (\$3.542 Billion)** not due for settlement as at 31st December 2013.

Implication

- Shortfall in remittance to the Federation account in the sum of **N2.146 Trillion** after considering **N654.474 Billion (N792.961 Billion-N138.487 Billion)** subsidy not deducted at source from amount approved by PPPRA in 2013.
- Loss of time value of money as a result of delays in remittance

Recommendations

1. NNPC should clear all the total domestic sales outstanding of **N2.146 Trillion**
2. NNPC to always ensure adherence to the 90 days credit period.

3.3.20 Analysis of Delays in Domestic Crude Oil Sales Settlement by NNPC

An analysis of the delays in the settlement of Domestic Crude Oil sales invoices was carried out and the result is summarised in Table 3.3.20 below.

Table 3.3.20 - Analysis of Domestic Crude Oil Sales Invoices due for Settlement and Actual Payment by NNPC

Estimated Bill of Lading Date	Expected Payment Date	Actual Payment Date	Expected Payment Cycle	Actual Payment Cycle	Default in Payment Cycle	Amount Due	Subsidy Deduction	Actual Amount Paid	Amount Outstanding	Interest Rate(12%)
			Days	Days	Days	N'Billion	N'Billion	N'Billion	N'Billion	N'Billion
30-Oct-12	28-Jan-13	11-Feb-13	90	104	(14)	203.48	-	112.54	90.94	(0.94)
30-Nov-12	28-Feb-13	5-Mar-13	90	95	(5)	197.91	-	109.33	88.58	(0.33)
31-Dec-12	31-Mar-13	8-Apr-13	90	98	(8)	291.47	-	127.19	164.27	(0.77)
31-Jan-13	1-May-13	6-May-13	90	95	(5)	348.36	-	182.38	165.97	(0.57)
28-Feb-13	29-May-13	10-Jun-13	90	102	(12)	177.81	-	112.38	65.43	(0.70)
31-Mar-13	29-Jun-13	9-Jul-13	90	100	(10)	267.85	-	112.38	155.46	(0.88)
30-Apr-13	29-Jul-13	6-Aug-13	90	98	(8)	160.89	-	105.19	55.70	(0.42)
31-May-13	29-Aug-13	9-Sep-13	90	101	(11)	200.01	-	116.38	83.63	(0.72)
30-Jun-13	28-Sep-13	8-Oct-13	90	100	(10)	233.71	-	122.38	111.33	(0.77)
31-Jul-13	29-Oct-13	8-Nov-13	90	100	(10)	206.18	-	112.38	93.80	(0.68)
31-Aug-13	29-Nov-13	6-Dec-13	90	97	(7)	208.17	-	142.00	66.17	(0.48)
30-Sep-13	29-Dec-13		90	(90)	208.47		-		208.47	(6.17)
				(190.00)	2,704.32		-	1,354.55	1,349.77	(13.42)

Table above shows the default cycle of invoices actually due for settlement in 2013 (i.e. those relating to 2012 transactions and those relating to the year under review) and the actual amount swept into the Federation in 2013 for settlement of the invoices due.

3.3.20.1 Key Findings on the delays in remittance of Crude Oil sales proceeds

The non-compliance with the 90 days credit limit by NNPC, despite the fact that payment is made by off-takers within 30 days has resulted to an aggregate default days of 190 days on the assumption that Bill of Lading dates (on aggregate basis) were the last day of the months, which is the worst case scenario.

Implication

The implication of this practice from the economic perspective is that the Federation may have lost **N13.42 Billion**, considering the time value of investing the amount due within the period of default at CBN interest rate of 12%.

Audit review could not confirm any evidence of late payment penalty made by NNPC as in the case with Off-takers.

Recommendation

NNPC to be made to comply strictly with the 90 days payment terms while penalties for delays in remittances should be paid.

3.3.21 Summary of CBN/NNPC Crude Oil and Gas Revenue (Naira) Control Accounts as at 31st December

From the review and validation of NNPC-COMD Domestic Crude Oil Sales Record as Populated; Monthly sweeping Mandates, CBN/NNPC Crude Oil and Gas Revenue (Naira) Account Statement and 2012 NEITI Oil and Gas Audit Report vis-à-vis Explanation, find below the summary movement in the Account for the year under review.

Table 3.3.21 Summary of CBN/NNPC Crude Oil and Gas Revenue (Naira) Control Accounts as at 31st December 2013

	N' Billion	N' Billion
Balance as at 1st January, 2013		1.95
Add Lodgments:		
Crude Oil Lifting Proceeds	1,466.95	
Outstanding Subsidy Repayment	91.41	
Other Miscellaneous Lodgments	13.67	1,572.03
Total Receipt		1,573.99
Less Payments:		
Transfer to the Federation Account	1,573.70	
Transfer to JV Cash Call Account	-	1,573.70
Balance at 31st December, 2013		0.29

Sources: Domestic crude oil sales profile for 2013 period, NNPC debit advice mandate to CBN and CBN/NNPC Crude Oil and Gas Revenue (Naira) Account

The table above summarises the transactions in the CBN/NNPC Crude Oil and Gas Revenue (Naira) account in 2013.

- The total receipts into the CBN/NNPC Crude Oil and Gas Revenue (Naira) Account was **N1.572 Trillion** (i.e. **N1.467 Trillion** for domestic crude oil sales, **N91.41 Billion** for Outstanding subsidy repayment and **N13.67 Billion** for other miscellaneous lodgements).
- The sum of **N1.574 Trillion** was swept to the Federation account from the total amount of **N1.574 Trillion** available in the account (i.e. **N1.95 Billion** balance from previous year and **N1.572 Trillion** receipts in 2013), leaving a balance of **N.29 Billion** in the account.

The details of the above transactions on monthly basis are presented in **Appendix 3.3.21** to this report.

3.4 Reconciliation and Validation of Financial Flows from Companies

The Financial Flows from all companies covered in the 2013 Oil and Gas Audit were reconciled with the receipts by the respective Government Agencies. The integrity of the figures provided by the companies and Government Agencies were further verified for correctness, completeness, accuracy and reliability through validation procedures adopted in the audit.

3.4.1 Reconciliation of Financial Flows

The reconciliation of financial flows is achieved by comparing the initial templates submitted by the oil operating companies with the templates from government agencies. The company operators submitted templates indicating payments in respect of their financial flows, while the government agencies submitted templates indicating receipt of funds from the operators. The payments are validated through payment documents, receipts, bank statements and other corroborative evidences.

The report covers Petroleum Profit Tax, Royalty (Oil), Royalty (Gas), Company Income Tax on Gas, Gas Flared Penalties, Concession Rentals, Education Tax, Value Added Tax, Withholding Tax, PAYE, NESS Fee and other payments by oil producing entities to government entities like NDDC, NCDMB, NIMASA and NIWA. These financial flows are made in US Dollars.

Tables of aggregated and disaggregated financial flows are presented hereunder. The summary of the financial flows, adjusted figures, unresolved differences and the explanations for the unresolved differences are found immediately after the summary schedule of each financial flow.

Table 3.4.1: Summary of Financial Flows Reconciliation for 2013

S/N	PAYMENT TYPE	Initial Templates			Adjustments		Adjusted Figures			2012 Unresolved Differences
		Receipt by Government	Payment from Entity	Difference	Govt	Entity	Receipt by Government	Payment from Entity	2013 Unresolved Differences	
		US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000	US\$'000
1	Petroleum Profit Tax	8,284,705	9,110,666	- 825,960	9,474,181	8,595,091	17,591,512	17,591,512	-	-
2	Royalty Oil	4,550,231	5,026,021	820,781	2,968,911	2,493,121	6,182,319	6,182,319	-	(5,026)
3	Royalty Gas	102,161	95,020	7,141	24,602	25,360	119,093	119,093	-	(4,788)
4	Company Income Tax on Gas	377,009	462,552	50,341	241,735	113,631	556,050	556,050	-	(3,675)
5	Concession Rentals	656	723	200	133,094	133,027	133,750	133,750	-	-
6	Gas Flaring Penalties	15,460	10,181	5,279	2,837	8,116	18,475	18,475	-	-
7	Education Tax	1,276,906	983,105	199,489	211,241	503,387	1,477,764	1,477,764	-	(7,450)
8	Dividend and Loan Repayment	-	1,289,592	(1,289,592)	-	-	1,289,592	1,289,592	-	-
9	NDDC 3% Contribution Levy	410,200	548,997	- 123,438	136,480	13,042	562,921	562,921	-	(26,595)
10	NCDMB 1% Levy	80,200	97,356	- 17,157	34,765	17,608	115,925	115,925	-	558.00
11	NIWA levy	-	-	-	-	-	713	221	492	-
12	Signature Bonus	12,500	12,500	-	-	-	12,500	12,500	-	-
13	VAT	661,935	773,997	(110,541)	301,350	189,279	965,521	965,521	-	-
TOTAL		15,771,962	18,410,710	-1,283,457	13,529,197	12,091,662	29,026,134	29,025,642	492	(46,976)

Note:

N/A in the column for 2012 above simply means "**Not Available**"

The Blank space means "no payment was reported"

Signature Bonus was not paid by any Entity in 2013 because there was no bid rounds

The aggregate unresolved difference with respect to companies Financial Flows reconciliation audit is **\$492,000**. This is very negligible difference (**0.0017%**) and indicates a progressive improvement and impact of the EITI process in Nigeria when compared to previous years.

The unresolved difference between Government and Companies is as a result of the sum of **\$713,000** reported as receipt by NIWA in the above table compared to the sum of **\$221,000** reported as payment by companies covered within the audit scope.

Two other sub-national financial flows were captured for the first time; these are the Cabotage Levy and Nigeria Export Supervision Scheme (NESS) Fee shown in table 3.1. The two financial flows could not be reconciled because detail information on the payments was not provided by the relevant Government Agencies. The figures captured for these payments are based on evidences provided by the companies but actual payments into the relevant Government accounts from the Oil and Gas sector may be in excess of the figures reported, as can be seen from CBN bank statement and publicly available information on NIMASA.

The total NESS collections computed from CBN bank statement is **\$81,535,000**, this is higher than the sum of **\$43,843,040 (N6,914,473,623.06)** reported to NEITI by CBN. Details of the payers were however not provided by CBN.

NIMASA did not provide any record of Cabotage and Freight Levy collection.

3.4.2 Summary of Unresolved National Inland Waterways Authority (NIWA) Levy

Table 3.4.2 - Summary of Unresolved NIWA Reconciliation

Ref	Amount reported by Entity	Amount reported by Government	Difference	Comments -NIWA
	USD\$'000	USD\$'000	USD\$'000	
NIWA	221	713	(492)	Total payments from the Companies covered in the Audit and recorded by NIWA in 2013 amounted to \$713,000. However, \$492,000 was unresolved because some payments could not be confirmed by the companies.

3.4.3 Key Findings on Reconciliation of Financial flows from companies.

- a. CBN failed to provide information on company-by-company basis for payments into the NESS account while most Oil and Gas companies did not present records on NESS payment, although some of the companies responded that shipping companies mostly paid NESS fees on their behalf.
- b. NIMASA failed to provide records of Cabotage and Freight Levy collection.
- c. The receipt of NLNG payments of dividends, loan and interest repayments for 2013 were confirmed by NNPC but could not be traced to the Federation account.

Implication

- a. The non-availability of company-by-company records on NESS payments at the CBN poses challenges to NEITI audit reconciliations and also defeats one of the cardinal objectives of NESS, which is the tracking of exports and repatriation of proceeds by companies engaged in Oil and Gas export.
- b. The non-availability of records from NIMASA poses challenges to the reconciliation of marine transport revenue accruing from companies engaged in Oil and Gas export.
- c. The non remittance of NLNG dividends, interest and loan repayment in the sum of **\$1.289 Billion** in 2013 makes the cumulative amount received from NLNG and not remitted to Federation account by NNPC as at the end of 2013 (including amounts revealed in previous NEITI audit reports) as **\$12.92 Billion**.

Recommendations

- a. CBN should maintain comprehensive information on a company-by-company basis for NESS payments.
- b. NIMASA should take the NEITI audit process seriously to avoid sanctions. The non-compliance with provision of information on marine transport related revenue from the Oil and Gas Companies is a violation of section 16 of NEITI Act.
- c. The recurring non-remittance of NLNG dividends, interest and loan repayments to the Federation Account by NNPC should be investigated.

CBN Response

- a. The total NESS levy collections on oil & gas in 2013 as reported by the designated deposit money banks (DMBs) and submitted to NEITI was **₦6,914,473,623.06**. However, NNPC NESS levy payment is usually paid in areas by the organization not through the DMBs.

In addition to payments made through the DMBs, the NNPC made direct payments amounting to **₦1,602,250,577.20** and **₦2,216,326,938.30** into the NESS account with CBN on 29th April, & 3rd October, 2013, respectively. These direct payments into the account by NNPC as well as unreported NESS levy collections / remittances by the DMBs were accountable for the differences between the figure reported by the DMBs amounting to **₦6,914,473,623.06** and the actual inflow into the NESS account of **₦12,858,922,697.36** (\$81,535,000) as at 31st December, 2013.

Statement of NESS oil & gas account is attached. NEITI may wish to note that NESS levy collections account is reported only in **Naira not** in foreign currency (FX).

- b. The breakdown of Oil and Gas NESS monthly payments which amounted to **₦6,914,473,623.06** from the DMBs for 2013, submitted on company by company basis is hereby attached. In addition, it should be noted that the NNPC NESS levy payments of **₦1,602,250,577.20** and **₦2,216,326,938.30** on 29th April, and 3rd October, 2013, respectively, were not included in the DMBS returns initially submitted to NEITI, hence the difference.
- c. The NESS process which is presently manual is being automated by the CBN Management and the recommendation of NEITI would be fully addressed upon completion.

3.4.4 Summary of Reconciled Flows from Companies

Table 3.4.4 below shows total company-by-company financial flows. This includes other payments that were not confirmed to the respective Government Entities. E.g. PAYE to States, WHT to States and other payments for which the Government Entities did not provide data for the reconciliation.

Table 3.4.4. – Summary of Reconciled Flows from Companies

	Petroleum Profit Tax (PPT)	Royalty Oil	Royalty Gas	License Fees and Concession Rentals	Value Added Tax	Withholding Tax FIRS	Signature Bonus	Gas Flared Penalties	Companies Income Tax (CIT)	PAYE to FIRS	PAYE to States	Withholding Tax to States	Dividends & Repayment of Loans by NLNG	NLNG Tax Payments to Local Govt.	Contributions to NDDC	Education Tax	NCDMB 1% Levy	NESS Fee	NIWA Levy	NIMASA Levy	Total
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	
AENR	-	-	-	-	650	-	-	-	-	-	-	-	-	1,673	6,047	442	310	-	-	9,121	
ALLIED ENERGY	-	-	-	-	-	30	-	-	-	-	159	-	-	-	-	-	-	118	-	-	307
AMNI	45,466	74,593	-	-	5,826	3,707	-	3,807	-	-	6,008	4,225	-	-	2,000	3,290	1,832	-	-	250	151,004
APDNL	476,828	290,491	-	-	29,331	30,478	-	2,749	-	175	10,626	901	-	-	35,956	22,529	8,578	1,677	-	2,400	912,720
APENL	328,679	163,382	-	-	11,536	12,486	-	216	-	-	-	15	-	-	25,442	18,955	2,803	610	-	-	564,123
ATLAS	-	5,827	-	15	-	-	-	52	-	-	13	-	-	-	-	-	-	-	-	-	5,907
BRITANNIA- U	-	-	-	-	166	701	-	-	-	-	73	0.3	-	-	-	-	-	46	-	-	987
CAVENDISH	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19
CHEVRON	595,410	733,180	10,884	133	73,467	88,359	-	2,073	-	10,939	182,530	804	-	-	61,879	61,550	15,785	8,487	-	4,782	1,859,263
CONOL	45,139	9,475	-	-	5,521	5,858	-	1,831	-	-	-	-	-	-	-	4,128	2,622	-	-	-	74,575
CONTINENTAL	92,608	118,148	-	-	3,059	991	-	2,333	-	-	-	-	-	-	-	2,509	-	-	-	-	219,648
DUBRI	-	711	-	1,430	81	233	-	79	-	-	82	15	-	-	44	37	-	14	6	-	2,732
ENERGIA	-	1,759	-	-	4,169	3,705	-	159	-	-	914	116	-	-	963	-	4,111	193	-	-	16,088
ESSO	2,167,730	15,735	-	-	18,993	18,629	-	-	-	38	6,948	60	-	-	8,094	96,704	-	1,602	-	170	2,334,703
EXPRESS	-	-	-	-	-	-	-	-	-	1	-	-	-	-	6	-	-	6	-	-	13
FHN	2,059	10,461	-	-	115	162	-	-	-	-	20	-	-	-	-	132	-	8	-	-	12,958
FRONTIER OIL LIMITED	-	-	-	-	2,242	1,522	-	-	-	-	716	72	-	-	-	-	-	-	-	-	-
MIDWESTERN	-	23,807	-	-	-	576	-	34	-	-	42	-	-	-	256	0.03	670	256	-	-	25,640
MOBIL	2,967,360	1,363,899	-	52	127,718	135,027	-	1,024	117,447	1,038	84,063	1,106	-	-	65,002	490,198	26,599	9,233	119	3,800	5,399,684
MONIPULO	19,033	27,478	-	-	226	356	-	61	-	-	-	-	-	-	-	-	-	-	-	-	47,154
NAE	291,840	74,995	-	-	29,575	148	-	-	-	3,313	3,313	-	-	-	6,526	12,888	4,523	563	-	-	427,684
NAOC	363,816	235,158	20,153	-	-	-	-	428	8,545	-	-	-	-	-	9,787	23,564	4,912	812	-	-	667,175
ND WESTERN	443	34,701	-	-	56	45	-	-	-	112	13	-	-	-	-	-	-	241	-	-	35,611
NDPR	-	1,134	-	-	1,097	1,351	-	-	-	179	70	-	-	-	-	-	-	-	-	-	3,832
NECONDE	-	29,140	-	-	2,487	2,699	-	-	-	-	1,216	302	-	-	-	-	-	171	-	-	36,014
NEWCROSS	999	-	-	10	886	805	-	325	-	-	206	9	-	-	-	112	329	-	-	-	3,681
NLNG	-	-	-	-	133,518	275,459	-	-	-	2,799	43,820	689	1,289,592	1,089	-	118,529	-	-	96	150,930	2,016,520
NNPC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24,213	-	-	-	24,213
NPDC	192,000	722,943	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	914,943
OANDO	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
ORIENTAL	-	185,972	-	-	12,672	567	-	308	-	-	61	14	-	-	1,325	-	4,956	1,504	-	-	207,379
PANOCLEAN	450	9,951	-	10	29,428	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39,839
PHILIPS	64,270	85,044	9,850	-	1,009	112	-	254	48,280	656	679	23	-	-	-	3,157	-	-	-	-	213,333
PILLAR	850	619	-	-	982	396	-	-	-	726	726	613	-	-	71	5	63	71	-	-	5,123
PLATFORM	1,976	885	-	-	53	711	-	315	-	-	-	-	-	-	2,250	185	87	51	-	-	6,514
SEPCO	-	72,000	-	-	578	422	-	6	-	129	129	-	-	-	272	-	82	272	-	-	73,891
SEPLAT	94,439	151,532	1,613	40	20,730	-	-	504	7,314	-	-	-	-	-	18,316	4,833	6,158	953	-	-	306,432
SHEBA	-	-	-	-	-	-	-	-	-	-	30	-	-	-	-	-	-	20	-	-	50
SHORELINE NATURAL RESOURCES	-	57,364	-	-	137	8	-	-	-	-	423	-	-	-	-	-	-	312	-	-	58,243
SIGMUND OILFIELDS LTD	-	-	-	-	-	-	12,500	-	-	-	-	-	-	-	-	-	-	-	-	-	12,500
SNEPCO	2,397,603	65,627	-	-	36,162	37,110	-	194	-	60	27,080	93	-	-	32,373	123,870	5,235	2,140	-	1,511	2,729,059
SPDC	1,469,627	781,462	44,964	324	140,303	138,469	-	794	194,829	1,151	120,173	4,824	-	-	136,181	151,931	19,560	-	-	-	3,204,592
STARDEEP	2,341,380	-	-	-	26	30,503	36,212	-	-	-	-	-	-	-	27,999	81,624	6,567	2,312	-	1,102	2,527,762
STATOIL	1,070,531	-	-	-	109	-	-	-	-	-	139,841	-	-	-	6,160	62,735	12	895	-	-	1,280,283
TEPNG	813,140	832,946	31,629	131,640	188,522	141,541	-	639	179,636	7,658	65,753	3,658	-	-	41,866	56,806	-	4,240	-	-	2,499,694
TUPNI	1,745,608	-	-	-	-	53,393	52,574	-	290	-	-	20	-	-	78,360	131,021	-	1,669	-	-	2,062,934
WALTERSMITH	2,226	1,900	-	50	220	243	-	-	-	-	-	-	-	-	99	425	-	99	-	-	5,263
TOTAL	17,591,512	6,182,319	119,093	133,750	965,521	991,693	12,500	18,475	556,050	168,524	556,030	17,740	1,289,592	1,089	562,921	1,477,764	115,925	63,100	221	164,945	30,984,211

The Petroleum Profit Tax figure reported for STARDEEP in table 3.4.4 above is the actual amount paid by STARDEEP including amount paid on behalf of Partners (FAMFA and PETROBRASS) in the sum of **\$842,887,000** which was recorded by CBN as payment from STARDEEP.

3.4.5 Validation of Flows

The Key Findings in the validation of financial flows was in respect of Petroleum Profit Tax (PPT), Royalty and Gas Flare Penalty.

3.4.5.1 Introduction

The Petroleum Profits Tax (PPT) is a tax imposed on the profits from the winning of petroleum in the course of petroleum operations in an accounting period. The principal legislation guiding the computation of this tax is the Petroleum Profits Tax Act 2004 (as amended).

Under the JV arrangement, there is consolidation of revenues and expenses in Nigerian petroleum profits taxation as revenue aggregation and deductible expense rules are set on a company basis and not at the level of wells, fields, blocks etc. Thus, there is no *Ring Fencing*.

The Production Sharing Contract (PSC) arrangements with NNPC appear to have introduced Ring Fencing to the Contract Areas covered by the PSC, thus each entity is requested to file its PPT Returns on a license-by-license basis and filed through NNPC-NAPIMS to FIRS.

For Royalty administration in Nigeria, the Department of Petroleum Resources (DPR) is responsible for the reconciliation of production volumes, computation and receipt of royalty on oil from all upstream companies in Nigeria.

In validating the royalty liabilities and payments made by the entities during the review year, the consultants were guided by the under listed sections of the various acts and regulations operating in Nigeria.

- A. Petroleum (Drilling and Production) Regulation of 1969
- B. Petroleum Profit Tax Act 1959 (LFN 2004)
- C. Deep Offshore and Inland Basin Production Sharing Contracts Act of 1999
- D. Marginal Fields Operations (Fiscal Regime) Regulations 2005

Details on the basis for computing PPT, Royalty and other taxes/levies are contained in **Appendix 3.4.5.1A**.

In addition, the following issues were noted with respect to Royalty and PPT validations for the year 2013:

I. Termination of 2000 MoU and establishment of new pricing regime

In an effort by DPR to resolve the lingering price dispute between the Federal Government and OPTS, the DPR in consultation with NNPC-COMD and FIRS, resolved in 2013 that:

- a. Realizable price should be used as fiscal price from January 2008 to June 2010.
- b. The OSP be used as fiscal price from July 2010 to December 2012. However, the companies objected to this.

- c. The weighting ratio of **50%** Platts, **30%** Argos and **20%** LOR be adopted for the new pricing mechanism for the first 2 years and thereafter changed to **40%** Platts, **40%** Argos and **20%** LOR. (**See Appendix 3.4.5.1B**). The new pricing mechanism takes effect from 1st January, 2013.

II. FIRS Interpretation of Court Ruling on the use of RP

FIRS communication of Court ruling in 2015 with effect that all parties to the dispute arising from the pricing mechanism of Crude Oil are advised to use RP as against OSP pending the resolution of the case.

This FIRS interpretation of court rulling was the position adopted by FIRS in its review of 2012 NEITI Audit report (**See Appendix 3.4.5.1C**) This position is contrary to the interpretation by the companies,hence the need to urgently resolve all pricing issues.

In the application of the two positions above, it is observed that in 2013, there were minimal issues with respect to the application of pricing (provided by NNPC) in the computation of royalties as the new OSP provided by NNPC is also referred to as RP (**See Appendix 3.4.5.1D**). However, some companies still adopt their respective RP, which is (different from that provided by NNPC) in pricing for PPT computations.

3.4.5.2 Review of 2012 PPT and Royalty Validation Report

The summary of findings as per the 2012 Audit and the present status as at 2013 audit are stated in the table below:

Table 3.4.5.2 - Summary of Findings in 2012 Audit Report

S/N	Summary of Findings in 2012	Update as at 2013 Audit
1	The lingering pricing dispute between the IOCs and Nigerian government resulted in revenue loss of over US\$4.04billion in the last8 years.	The price differentials continued as government and the IOCs could not reach a mutual agreement on the pricing methodology to be adopted.
2	The disputes between DPR and SNEPCO persisted as both parties continued to compute royalty liabilities using different rates. While SNEPCo applied 1% for the OML 118 (Bonga), DPR continued to apply 1.75%.	Dispute persisted as SNEPCO applied 1% on its royalty computation against DPR's advised rate of 1.75%.
3	Default in payments by the indigenous operating companies as regards Royalty and PPT payments.	Majority of the marginal field entities continued to default in payments of royalty and PPT in 2013 in total breach of the Petroleum Regulation Act.

3.4.5.3 Summary of Royalty Validation

The table below shows comparison of the re-computed royalty liabilities against the entities computation.

The royalty validation is grouped according to the operating arrangements of the entities for analysis purposes:

Table 3.4.5.3 - Revalidation of the Royalty Value on Chargeable Oil

	Royalty Validation	2013 NEITI OIL & GAS AUDIT		
		Computation by NEITI Auditors	Computation by Entity	Under/(Over) Assessment
		USD\$	USD\$	USD\$
	Entities operating in PSCs			
1	SNEPCO	116,572,856	65,626,839	50,946,017
2	STERLING	49,223,800	44,528,610	4,695,190
3	NAE	71,159,875	71,149,908	9,967
		236,956,531	181,305,357	55,651,174
	Entities operating in JVs			
1	SPDC	643,474,685	570,313,211	73,161,474
2	CNL	696,719,172	691,513,775	5,205,397
3	PANOCEAN	28,006,846	0	28,006,846
4	TEPNG	387,788,921	385,520,336	2,268,586
		1,755,989,624	1,647,347,322	108,642,302
	Entities operating in Marginal fields/sole risks			
1	WALTERSMITH	2,661,798	2,656,550	5,248
2	ENERGIA	2,005,156	1,997,655	7,501
3	PILLAR	1,424,605	1,421,426	3,179
4	NEWCROSS	524,347	519,938	4,409
5	MONIPULO	23,352,430	23,275,960	76,469
6	FHN	18,029,976	16,367,014	1,662,962
7	SHEBA	2,203,490	0	2,203,490
8	NECONDE	37,131,954	37,065,699	66,255
9	SHORELINE	75,518,204	75,517,744	461
		162,851,960	158,821,986	4,029,974
	GRAND UNDER/(OVER) ASSESSMENTS	2,155,798,114	1,987,474,665	168,323,449

3.4.5.4 Key findings from Royalty Validation

I. Pricing Methodology

The Royalty payable on Crude Oil by companies is a function of the value of the Crude Oil, which in turn is determined by the price. There have always been issues over the pricing mechanism to be adopted in the computation of Royalty, i.e whether OSP (as determined by NNPC) or RP (as determined by Companies) should be used.

- a. Royalty under assessments decreased from **USD\$465million** (30 entities) in 2012 to **US\$166.54 Million** (17 entities) in 2013, representing a decrease of **64%**. The under assessment recorded was mainly as a result of price differentials between the official Government position and that of the Oil Companies.
- b. The PSC entities had the proportion of **34%** under-assessment, while the JV entities had **65%**. Total under assessment from Marginal fields amounted to **USD\$443.182 Million1%**, this was due to the fact that reconciliation meetings were held regularly with these indigenous companies and the Official Selling Price (OSP) was applied on their production.
- c. The prices applied by SPDC on its royalty computation continued to differ from the advised prices of NNPC-COMD. This difference resulted in an underpayment of **US\$73,161,473.98** for 2013.

Implication

The lingering pricing dispute between the IOCs and Nigerian government has resulted in revenue loss of over **US\$4.2billion** in the last 8years.

Recommendation

- a. The Minister of Petroleum Resources should compel the DPR to finalize the appropriate pricing methodology for royalty computation.
- b. The controversy over the new pricing regime of 2013 and the Court ruling of 2015 on the application of OSP should be speedily resolved.
- c. DPR, FIRS and NNPC should conclude the on-going discussions on pricing methodology.
- d. An adequate pricing framework should be clearly defined in the Petroleum Industry Bill (PIB).

II. Inconsistent application method of **OSP** to compute Royalty by DPR

It was observed that the application of prices on production volumes were not consistent during the year. E.g. OSP was applied on production volumes as per their B/L date in some months while average monthly OSP was applied in some other periods by DPR.

Implication

Inconsistent valuation of production volumes leads to different computation of Royalty payable.

Recommendation

Royalty computation should be carried out based on the average monthly price as provided by NNPC-COMD adjusted by the crude type's API gravity (considering the pricing option adopted by the entity).

III. Disputes in Applicable Rates for SNEPCO

During the 2013 audit, it was observed that the disputes between DPR and the PSCs (SNEPCO) persisted as both parties continued to compute royalty liabilities using different rates. While SNEPCO apply 1% DPR continues to apply 1.75%. This brought about an under assessment of USD\$50,946,017.

Implication

Shortfall in revenue remittance to the Federation account.

Recommendations

The Federal Government should compel the Regulatory Agencies and the IOCs to agree on a rate to be adopted for subsequent years or compel SNEPCO to adopt DPR's rate, being the agency responsible.

The Ministry of Petroleum Resources should appoint an independent consultant to confirm the accurate water depth level for these blocks and advise on an appropriate rate which should be agreed with the operators of the blocks.

Alternatively, an amendment to the deep offshore and inland basin Act can be effected by the National Assembly to cater for the water depths in disputes.

IV. Default in Royalty payments by the indigenous operating companies

The audit observed that over 44% of the marginal field and sole risks companies defaulted in the payments of the obligatory dues to the Federation.

Implication

Shortfalls in revenue remittance to the Federation account

Recommendation

The respective agencies; DPR, FIRS, NDDC, NCDMB and TETFUND should ensure the entities pay what is due as at when due or they should be strict with the penalties imbedded in their Act.

V. Clarification of the Petroleum (Drilling and Production) Regulations of 1969 as amended

In accordance with section 61(1) of the Petroleum (Drilling and Production) Regulations of 1969 (as amended), the lessee is expected to pay to the Minister not more than one month after the end of every quarter or otherwise as the Minister may direct a royalty at a rate of the chargeable value of the crude oil and casing-head petroleum spirit, produced from the relevant area in the relevant period. However, we observed that while JVs were paying on a monthly basis (with the provision of the two-month in arrears), the indigenous entities were paying lump sum on a quarterly basis.

Implication

Inconsistent timing in revenue flows to the Federation account.

Recommendation

DPR is to clarify or interpret this clause and ensure uniform enforcement on payments across all petroleum companies.

3.4.5.5 Entities Response

I. SNEPCO.

"The reason for the difference between the royalty rate applied by NAPIMs in the tax return filed on behalf of the contract area and the rate applied by the contractor, SNEPCO, in the tax computation is due to the fact that ongoing negotiations between DPR and SNEPCO are yet to be concluded regarding the compromise/mutually acceptable royalty rate that should be applied for purposes of royalty computation and payment. The necessity for a mutually agreeable compromise arose because by virtue of the Section 61, subsection 1a, vii, of the Petroleum Act, Laws of the Federation of Nigeria, the applicable rate defined under the law for production in water depths beyond 1,000 metres, is actually zero percent. Considering that on the average the Bonga PSC is at water depths in excess of 1,000m, it would be expected that no royalty is payable from the Bonga PSC. However due to the practical fact that by nature, the sea bed is not static as obtains onshore, both DPR and SNEPCO recognised that there would be areas within the Bonga PSC that may be more or less than 1,000m water depth. Accordingly discussions commenced between both parties to ascertain the compromise royalty that should be applied. Unfortunately this has not been concluded and has formed part of the issues currently under dispute between NNPC and SNEPCO

It is noteworthy that Section 61, subsection 2a and 2b, of the Petroleum Act, also recognises and supports that in the event of a dispute or disagreement as to royalty due, the tax payer is permitted to apply the rate it believes in pending resolution of the issue. Please see extract of the relevant sections of the Petroleum Act attached for your guidance."

II. STERLING

a. "We do not agree with the Royalty difference amount of \$ 4,695,191.69 as computed in the above report. This is arising mainly on account of production quantity difference, which has been contested with DPR and due to the method of calculation used by NEITI. We had also provided a letter from NNPC which gives a year end status wherein they have mentioned that all our dues with regards to Royalty for Year 2013 have been cleared.

Hence we do not accept this differential amount of \$ 4,695,191.69, for the year 2013, as payable by our company."

b. "There was discrepancy in production volume between SEEPSCO & DPR in which DPR volumes were much higher. This resulted in a difference for royalty calculated by NEITI based on DPR's volumes.

This issue has been now reconciled and DPR have given a sign off agreeing to our volumes, a copy of which has been given to NEITI. This should now take care of the diff. in Royalty..."

III. NAE

"...While NAE applied the actual Sales Prices for Contractor's liftings and estimated prices for NNPC's liftings, as NNPC does not make their actual lifting prices available to Contractor, NEITI has applied the Official Sale Price (OSP) of NNPC. NAE applied the actual sales price in computing the royalty because the RP mechanism as enshrined in the PSC Agreement has not been agreed by NNPC and contractor.

It should be noted that even though the RP mechanism has not been agreed by the Parties (NNPC & Contractor), NNPC lifted their Royalty oil entitlement based on their computations which used the OSP. Therefore, there is no any outstanding royalty liability on the part of Contractor."

IV. SPDC

"Variances mainly due to:

1. NEITI did not capture SPDC's November and December 2012 liabilities of (\$91,193,699 and \$87,140,562) respectively, which were paid in January and February 2013. Kindly incorporate this to show a full view of payments made for 2013.
2. The variance in hydrocarbon volume of 1,576,059Bbls noted above arose because the NEITI auditors did capture the Brass volume as reported. The difference in royalty computation of \$73,161,473.98 as noted by the NEITI auditors arose from the use of 53.6% as SPDC equity holding in EA instead of 30% and use of different price regime. In addition, the NEITI auditors did not take into consideration the OML Rental payment of \$109,476 into its computation.

We noted that NEITI have used a series of what it described as 'prices advised by NNPC-COMD' otherwise referred to as official selling price (OSP) as the basis of its computation. Please note that we are not aware of any provisions of the Petroleum Act (PA) which provides for the use of fiscal prices advised by NNPC as the basis for determining royalty payable.

Furthermore, as you may be aware, the concept of Official Selling Price (OSP) is not recognised under any provisions of the PA and hence could not be recognised by us. We note however that Section 23 of the Petroleum Profit Tax Act (PPTA), Laws of the Federation of Nigeria (LFN) 2004, mentioned the use of Posted Price when certain conditions are met. Please note that a key condition required under Section 23 (3 & 5) of the PPTA is an agreement of such prices between the Government of Nigeria and the Company in writing before it could be used for PPT or Royalty purposes. To date, SPDC has no such agreement with Government and hence could not recognise Posted Price even if it were issued by NNPC.

It is also worth mentioning that in recognition of the significance of Section 23 of the PPTA and its provisions, there is an ongoing Department of Petroleum Resources (DPR) initiated discussion with the industry which is aimed at reaching an agreement in compliance with Section 23 (3 & 5) of the PPTA on the pricing basis for fiscal purposes.

We also observed that contrary to the provisions of the law, your computation was based on production volume from January to December 2012. The law provides that the first monthly payment shall be due and payable not later than the third month of the accounting period; hence the payment in scope for the 2012 audit is in respect of Production volume from November 2011 to October 2012 as the royalty payable was paid in January 2012 to December 2012. We also observed that the OML Rental was not deducted from the Royalty Payable for the period.

Kindly update your computation accordingly.

Conclusion:

Based on the above submission, we request that you adopt the prices as advised by SPDC and update your computation; this will bring outstanding royalty highlighted in NEITI's draft report to nil."

V. CHEVRON

"The computation of \$691,513,775.00 by Chevron was as of the period when RP was used as basis of Royalty calculation. However as a result of the agreement of using a New pricing formula effect 2013, Chevron had recalculated the 2013 Royalty and came up with a total of \$698,319,410. The differential of the initial payments made to the royalty due which stands at \$5,785,003.14 had been paid to the government. (A copy of the receipt had been submitted to the Auditors)."

VI. PANOCEAN

"We have had reconciliation meetings with DPR on the subject matter and have agreed a payment plan for same."

VII. TEPNG

1. *"We observed that NEITI's computations were based on production volumes for January to December 2013, rather than cash basis (November 2012 to October 2013) envisaged and as directed by NEITI at the time of completing the template. Your paragraph 1.4 above summarises our total payments in 2013 (TEPNG JV & SPDC JV) on cash basis covering November 2012 to October 2013, as payments are made two (2) months in arrears.*
2. *US\$385,520,335.58 was the royalty due as computed by the DPR using OSP, while US\$383,734,051.61 was computed and duly paid by TEPNG using RP as shown in the signed resolutions of the reconciliation exercise between DPR and TEPNG, pending the resolution of a new mutually agreed pricing mechanism.*

We are not in agreement with the application of Official Selling Price (OSP) by NEITI as provided by NNPC in computing revenue. This approach in computing the fiscal value of crude oil based on the OSP as provided by NNPC/COMD contravenes the provisions of the Petroleum Profits Tax Act (PPTA) 1959.

Section 9(2)(a) of the Petroleum Profits Tax Act (PPTA) stipulates that the value of oil for the purpose of royalty shall be in accordance with the provisions of any enactment applicable thereto and any financial arrangement or arrangements between the Federal Government of Nigeria and the oil producing company.

In furtherance to this directive, Section 21(5) of the PPTA provides for a "posted price" established by the company, after agreement with the Government of Nigeria as to the procedure to be followed for the purpose, as its posted price for Nigerian crude oil of that gravity and quality.

These sections of the PPTA clearly spell out the processes for establishing a 'pricing methodology' for the valuation of crude oil produced for the purpose of export and payment of Royalty.

The directive of NNPC on OSP was not mutually agreed with oil producing companies and is in contravention of the provisions of the PPTA on pricing. Discussions are ongoing with NNPC as representatives of the Government of Nigeria. Consequently, TEPNG has valued the lifting volumes for the purpose of revenue using Realisable Price (RP), being the most recent agreed position between the Government of Nigeria (represented by NNPC) and the Oil Industry.

VIII. WALTERSMITH

"Noted, however our royalty obligation is reconciled and signed off by the DPR at regularly scheduled meetings."

IX. ENERGIA

"The outstanding has been settled by Energia Limited."

X. PILLAR

No response.

XI. NEWCROSS

"The royalty amount is a reconciled amount computed by DPR."

XII. MONIPULO

No response.

XIII. FHN

No response.

XIV. SHEBA

No response.

XV. NECONDE

"...NEL is an indigenous newcomer and a small off taker with only one asset (OML 42) operated by NPDC as at 31 December, 2013. OML 42 was acquired from SPDC & the other JV partners in an arrangement whereby NEL has a "Spot price Offtake Agreement" with Shell Western Supply and Trading Limited (SWEST), an affiliate of SPDC. SWEST trades NEL's crude in total based on spot prices. NEL has an average of one lifting of about 120,000 bbls monthly.

NEL does not have any control over its realizable prices and only earns revenues from crude sold at spot prices. Therefore, NEL can only recognize revenues, royalties and compute taxes based on NEL's realized prices and that has been the practice since 2013 as agreed with DPR. It will amount to inequity and unfair practices for NEL to be assessed to royalties on revenues unearned by the Company."

XVI. SHORELINE

"All outstanding payments for 2013 royalty were paid in 2014, following the full year reconciliation exercise jointly carried out between Shoreline and DPR."

3.4.6 Summary of PPT Validation

3.4.6.1 Revalidation of the Fiscal Value on Chargeable Oil

During the 2013 audit, the consultants recomputed the fiscal value on chargeable oil. The analysis below shows the under-assessment from the respective entities:

Table 3.4.6.1 - Revalidation of the Fiscal Value on Chargeable Oil

	Petroleum Profit Tax Validation	2013 NEITI OIL & GAS AUDIT			
		Computation by NEITI Auditors	Computation by Entity	Computation Variance	Under/(Over) Assessment
		USD\$	USD\$	USD\$	USD\$
	Entities operating in PSCs				
1	SNEPCO	5,678,784,563	5,665,832,133	12,952,430	6,476,215
2	ESSO	4,138,872,989	4,133,250,413	5,622,576	2,811,288
3	STATOIL	863,916,844	863,237,999	678,845	577,018
4	TUPNI	3,252,740,675	3,248,071,086	4,669,590	3,969,151
		13,934,315,072	13,910,391,630	23,923,441	13,833,673
	Entities operating in JVs				
1	SPDC	3,721,708,779	3,658,295,412	63,413,367	53,901,361
2	NAOC	1,051,357,682	1,036,165,852	15,191,830	12,913,055
3	MPNU	7,502,501,756	7,444,611,295	57,890,461	49,206,892
4	TEPNG	3,164,408,108	2,817,503,111	346,904,996	294,869,247
5	CONOCO PHILIPS	469,814,380	469,772,526	41,854	35,576
		15,909,790,704	15,426,348,196	483,442,508	410,926,130
	Entities operating in Marginal fields/sole risks				
1	CONOIL	62,311,160	62,161,160	150,000	127,500
2	MONIPULO	151,491,685	148,514,449	2,977,236	2,530,651
3	ATLAS	66,477,575	64,021,281	2,456,294	2,087,850
4	SEPLAT	803,996,925	801,635,574	2,361,351	2,007,148
		1,084,277,345	1,076,332,464	7,944,881	6,753,149
	GRAND UNDER/(OVER) ASSESSMENTS	30,928,383,120	30,413,072,291	515,310,830	431,512,952

3.4.6.2 Findings and Recommendations

I. Granting of Pioneer Status

The grant of Pioneer Status to Oil and Gas Companies has greatly undermined the optimal collection of revenue due from PPT. A total of 18 companies were granted pioneer status, as at 2013 and all the companies are operators in the marginal field segment of the Nigerian Oil and Gas Industry.

The legal framework governing the operations of the pioneer status is the Industrial Development (Income Tax Relief) Act of 1971 (IDITRA), a subsidiary legislation of the Companies Income Act (CITA), which is the legal basis of taxing non-oil and gas companies in Nigeria. The pioneer status is a form of tax waiver issued by the Nigeria Investment Promotion Council (NIPC) as an incentive

granted to companies that have been considered to be engaged in “pioneer businesses” or simply as a means of encouraging the development of certain type of businesses.

The first pioneer status was granted in 2009 and as at October 2014, the sum of **US\$ 1,172,800,956.38** was established by Federal Ministry of Finance to have been waived by the FGN through tax holidays to 12 of the beneficiary companies.

There is also the issue of whether the granting of Tax waivers is appropriately located within the NIPC and also the applicability of Pioneer status to oil and gas companies, given the fact that the IDITRA is a subsidiary legislation of CITA, whereas Oil and Gas companies are taxed under the PIT

Implication

The waiver granted to companies under pioneer status has led to huge shortfalls in revenue remittance to the Federation account.

Recommendations

- a. Pioneer status should not be granted to any company in the Oil & Gas Sector unless it is evidently clear that the company is actually pioneering an aspect of the industry in the country.
- b. A coordinating Desk should be established in the FMF for all the agencies that process tax incentives while the final approval for tax waivers should be issued by the Minister of Finance.

II. Pricing Methodology

The differences in the method of pricing between the IOCs and Nigerian Government, the NNPC issues Official Selling Price (OSP) for value determination while the IOCs prefer the Realisable Price (RP). This lingering price dispute is a major challenge in the assessment of Taxes and Royalties.

As shown in table 3.4.6.1 above, the value of under-assessment on the fiscal valuation of chargeable oil was over **USD\$431.5million** in 2013. The JV Companies had the highest under-assessment in the sum of over **USD\$410.9million** followed by the PSCs with over **USD\$13.8million** and Marginal Fields/Sole Risk – **USD\$6.8million**. The under/over assessments were computed based on the advised pricing methodology by NNPC-COMD as against pricing methodologies used by the companies. For instance, SPDC applied a different pricing methodology against the prices advised by NNPC-COMD, resulting in revenue loss of over **USD\$6.2billion** in the last 8years.

Implication

Shortfalls in revenue remittance to the Federation account.

Recommendations

The Federal Government should compel the regulatory agencies and the IOCs to finalize the methodology to be adopted for subsequent years or speed up the committee set up to resolve this dispute. The Regulatory agencies and IOCs should speed-up and conclude the on-going discussions.

3.4.6.3 Entities Response

I. SNEPCO.

"We noted that NEITI have used prices described as 'OSP provided by COMD-NNPC' as the basis of its computation. Please note that we are not aware of any provisions of the Petroleum Profit Tax Act (PPTA) which provides for the use of fiscal prices unilaterally advised by NNPC, as the basis for determining the fiscal value of crude oil sales for PPT purposes.

Furthermore, as you may be aware, the concept of Official Selling Price (OSP) is not recognized under any provisions of the PPTA and hence could not be recognized by us in our tax (PPT) computations/returns. We note however that Section 23 of the Petroleum Profit Tax Act (PPTA), Laws of the Federation of Nigeria (LFN) 2004, mentioned the use of Posted Price when certain conditions are met.

Please note that a key condition required under Section 23 (3 & 5) of the PPTA is an agreement, in writing, of the crude prices, which will form the basis of fiscal valuation, between the Government of Nigeria and the Company before it could be used for PPT purposes. To date, SNEPCo has no such agreement with Government and hence could not recognise Posted Price (or OSP) even if it were issued by NNPC.

It is also worth mentioning that in recognition of the significance of Section 23 of the PPTA and its provisions, there is an ongoing Department of Petroleum Resources (DPR) initiated discussions with the industry which is aimed at reaching an agreement in compliance with Section 23 (3 & 5) of the PPTA on the pricing basis for fiscal valuation purposes.

Pending resolution and agreement on the fiscal prices between the government and SNEPCO/and other industry producers, SNEPCO's fiscal valuation is based on a Realisable Price (RP) which forms the basis of the actual sales prices reported by Company for tax purposes. The RP is based on the last set of agreed fiscal valuation pricing agreed between the government (DPR) and the industry, i.e. the 2000 Memorandum of Understanding issued by the Government.

Conclusion:

Based on the above submission, NEITI is incorrect to claim that SNEPCO failed to disclose its actual sales value from liftings. It should be noted that SNEPCO's oil sales are based on its actual proceeds which was based on the RP, which has been clearly disclosed in SNEPCO's tax computations/returns, copies of which have been already provided to NEITI.

We therefore request that you adopt the Realisable Price as advised by the parties to the Production Sharing Contract (PSC) and as contained in our PPT Returns earlier provided to you."

II. ESSO

"The "NEITI Audit Value" shown above amounting to USD4,138,872,989.22 is based on application of NNPC's official selling price (OSP) to determine the value for each OML 133 PSC Parties' crude oil lifting. Whereas, by the provisions of the PSC, the PSC Act and the PPTA, each

lifting is to be valued at the respective OML 133 PSC parties' actual f.o.b. sales price in the absence of an agreed crude oil price between the Contractor and the government (Section 13 of the Deep Offshore and Inland Basin Production Sharing Act, Section 23 of the PPTA, and Clause 9.1 (b) (v) (c) of OML 133 PSC).

Consequently the application of NNPC's OSP to all parties lifting is not in line with any known statutes and is thus not valid for the purpose of computing fiscal value for PPT computation. Thus EEPNL has no refund to the Federal Government of Nigeria.

Based on the forgoing, we recommend that this issue be closed."

III. STATOIL

No response.

IV. TUPNI

"We are not in agreement with the application of Official Selling Price (OSP) by NEITI as provided by NNPC in computing revenue. This approach in computing the fiscal value of crude oil based on the OSP as provided by NNPC/COMD contravenes the provisions of the Petroleum Profits Tax Act (PPTA) 1959.

Section 9(2)(a) of the Petroleum Profits Tax Act (PPTA) stipulates that the value of oil for the purpose of royalty shall be in accordance with the provisions of any enactment applicable thereto and any financial arrangement or arrangements between the Federal Government of Nigeria and the oil producing company.

In furtherance to this directive, Section 21(5) of the PPTA provides for a "posted price" established by the company, after agreement with the Government of Nigeria as to the procedure to be followed for the purpose, as its posted price for Nigerian crude oil of that gravity and quality.

These sections of the PPTA clearly spell out the processes for establishing a 'pricing methodology' for the valuation of crude oil produced for the purpose of export and payment of Royalty.

The directive of NNPC on OSP was not mutually agreed with oil producing companies and is in contravention of the provisions of the PPTA on pricing. Discussions are ongoing with NNPC as representatives of the Government of Nigeria. Consequently, the OML 130 PSA partners have valued the lifting volumes for the purpose of revenue using Realisable Price (RP), being the most recent agreed position between the Government of Nigeria (represented by NNPC) and the Oil Industry.

Based on our comments above, the OML 130 PSA contract area is not liable to further payment of PPT for 2013."

V. SPDC

1. PRICING

"We noted that NEITI have used a series of what it described as 'prices advised by NNPC-COMD' otherwise referred to as official selling price (OSP) as the basis of its computation. Please note that we are not aware of any provisions of the Petroleum Act (PA) which provides for the use of fiscal prices advised by NNPC as the basis for determining petroleum profit tax payable.

Furthermore, as you may be aware, the concept of Official Selling Price (OSP) is not recognised under any provisions of the PA and hence could not be recognised by us. We note however that Section 23 of the Petroleum Profit Tax Act (PPTA), Laws of the Federation of Nigeria (LFN) 2004, mentioned the use of Posted Price when certain conditions are met. Please note that a key condition required under Section 23 (3 & 5) of the PPTA is an agreement of such prices between the Government of Nigeria and the Company in writing before it could be used for PPT or Royalty purposes. To date, SPDC has no such agreement with Government and hence could not recognise Posted Price even if it were issued by NNPC.

It is also worth mentioning that in recognition of the significance of Section 23 of the PPTA and its provisions, there is an ongoing Department of Petroleum Resources (DPR) initiated discussion with the industry which is aimed at reaching an agreement in compliance with Section 23 (3 & 5) of the PPTA on the pricing basis for fiscal purposes.

Conclusion:

Based on the above submission, we request that NEITI adopt the prices as advised by SPDC; this should address the outstanding PPT highlighted in NEITI's draft report."

VI. NAOC

Kindly find below NAOC's reconciliation to the above PPT Difference.

	USD \$	USD \$
NEITI's Audit Fiscal Value		1,051,416,056.44
Less: Duplicated Entry		
BORDEIRA (70,000 barrels @ \$106) - 07.06.13	(7,420,000.00)	
Less: Inclusion of NAE PSC lifting		
ALMI SKY (76,000 barrels @ 103.029) -5/7/2013	(7,830,204.00)	(15,250,204.00)
NAOC's Fiscal Value		1,036,165,852.44

Please find attached (**Appendix 3.4.6.3**) providing NAOC's clarification on the above as well as supporting documents on the incorrect categorization of NAE's Abo lifting of **75,000 barrels** as NAOC in the NNPC crude lifting advice on 7th May 2013. Also note that as contained in the supporting documents the correct volume of the ALMI SKY lifting is **75,000 barrels**.

VII. MPNU

"The "NEITI Audit Value" shown above amounting to USD7, 502,501,755.72 is based on application of NNPC's official selling price (OSP) to determine the value for each cargo of crude lifted by MPNU. Whereas, by the provisions of the Section 23 of the PPTA, the price to be used for the purpose of computation of fiscal price shall be as agreed by the Government of Nigeria and the Company from time to time. Please see excerpts below.

*S.23 (3) - "For the purpose of subsection (2) of this section the relevant sum per barrel of crude oil exported by a company is the posted price applicable to that crude oil reduced by such allowances (if any) as may from time to time **be agreed in writing between the Government of Nigeria and the company**".*

MPNU and the Regulatory Agencies (DPR & NNPC) have agreed in principle the fiscal price methodology applicable effective January 2013. 2013 fiscal value have been determined by MPNU on the basis of this aligned methodology Consequently, MPN has no refund to the Federal Government of Nigeria.

Based on the forgoing, we recommend that this issue be closed."

VIII. TEPNG

"We are not in agreement with the application of Official Selling Price (OSP) by NEITI as provided by NNPC in computing revenue. This approach in computing the fiscal value of crude oil based on the OSP as provided by NNPC/COMD contravenes the provisions of the Petroleum Profits Tax Act (PPTA) 1959.

Section 9(2)(a) of the Petroleum Profits Tax Act (PPTA) stipulates that the value of oil for the purpose of royalty shall be in accordance with the provisions of any enactment applicable thereto and any financial arrangement or arrangements between the Federal Government of Nigeria and the oil producing company.

In furtherance to this directive, Section 21(5) of the PPTA provides for a "posted price" established by the company, after agreement with the Government of Nigeria as to the procedure to be followed for the purpose, as its posted price for Nigerian crude oil of that gravity and quality.

These sections of the PPTA clearly spell out the processes for establishing a 'pricing methodology' for the valuation of crude oil produced for the purpose of export and payment of Royalty.

The directive of NNPC on OSP was not mutually agreed with oil producing companies and is in contravention of the provisions of the PPTA on pricing. Discussions are ongoing with NNPC as representatives of the Government of Nigeria. Consequently, TEPNG has valued the lifting

volumes for the purpose of revenue using Realisable Price (RP), being the most recent agreed position between the Government of Nigeria (represented by NNPC) and the Oil Industry.

Based on our comments above, TEPNG is not liable to further payment of PPT for 2013.”

IX. CONOCO PHILIPS

“...the difference between our numbers and your (NEITI) numbers is from the difference in sales price for our crude. We used the retail price we sold it while you have applied 'OSP'. The law is that the price that should be used is the posted price (PP), defined as the Free on Board value at the point of export of crude of similar quality and gravity as agreed between the company and the Government of Nigeria..”

X. CONOIL

“The Conoil fiscal value was never \$62,161,160.00. The difference of \$150,000.00 was due to November OSP of \$111.927 used instead of \$114.927 official OSP. This was corrected during the 2013 audit and audit adjustment was passed in respect of this. Therefore, Conoil fiscal value is \$62,311,160.00 as against your computation of \$62,161,160.00...”

XI. MONIPULO

*“We have carefully reviewed the PPT Validation Report by your company, and wish to state that we are **not** in agreement with the additional PPT liability of \$2,530,650.57. The reason for our disagreement is due to the fact that in arriving at the Fiscal Value of Crude Oil (Antan Blend) (i.e. \$151,491,685.44), you used official selling price instead of the actual price realized from the sales of our crude.”*

XII. ATLAS

No response. Atlas presented Unaudited Management Account showing company's own computation on Fiscal Value on Chargeable Oil.

XIII. SEPLAT

No response.

3.5 Social Expenditures, Infrastructure Project and Quasi-Fiscal Expenditure

3.5.1 Social Expenditure

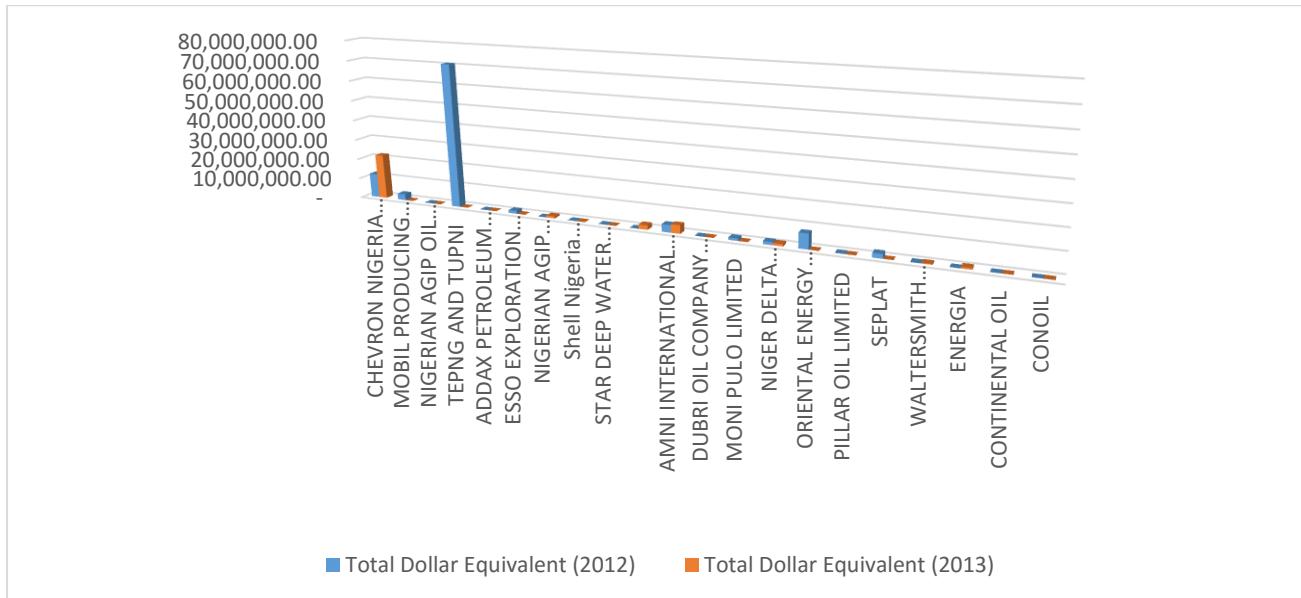
Social Expenditures are incurred on infrastructural projects by companies as a form of giving back to the society in which they operate (corporate social responsibilities). These can be in form of buildings, structures and facilities specifically constructed to serve the community at large. The most apparent form of the social infrastructure projects are hospitals, schools and community facilities.

The table 3.5.1 below compares the total amount spent on Social Infrastructural Projects in 2012 and 2013. The Total social infrastructural project for the period under review is 407 units valued at **N14,152,696,823** and **\$13,546,000** as against **268** units valued at **N4,302,089,446** and **\$4,354,807** in 2012. Detail of projects are contained in **Appendix 3.6.1**

Table 3.5.1 Social Expenditure

ENTITIES	Social Expenditure						2012 Expenditure		
	No. of Projects	2013 Expenditure			Total Dollar Equivalent (A+B)	No. of Projects	2012 Expenditure		Total Dollar Equivalent (A+B)
		(A) N	(B) \$	Total Dollar Equivalent (A+B) \$			(A) N	(B) \$	
CHEVRON NIGERIA LIMITED (CNL)	81	1,879,507,243	-	11,933,379	121	3,478,996,153	-	-	22,059,452
MOBIL PRODUCING NIGERIA UNLIMITED (MPNU)	48	411,965,587	370,519	2,986,173	42	586,726	612	4,332	
NIGERIAN AGIP OIL COMPANY LIMITED (NAOC)	12	4,956,360	-	31,469	0	-	-	-	-
TEPNG AND TUPNI	128	10,337,571,844	5,248,801	70,884,178	0	-	-	-	-
ADDAX PETROLEUM DEVELOPMENT NIGERIA LIMITED (APDNL)	9	261,058	1,681	3,339	10	45,398	-	-	288
ESSO EXPLORATION AND PRODUCTION NIGERIA LIMITED (EEPNL)	2	230,726,665	-	1,464,931	16	202,756	1,704	2,990	
NIGERIAN AGIP EXPLORATION LIMITED (NAE)	4	92,948	250	840	7	123,869,029	250,000	1,035,423	
Shell Nigeria Exploration and Production Company (SNEPCO)	27	153,200	967	1,940	0	-	-	-	-
STAR DEEP WATER PETROLEUM LIMITED	19	2,038,296	1,470	14,412	15	1,829,905	-	-	11,603
STERLING OIL EXPLORATION & ENERGY PRODUCTION CO. LIMITED	6	230,185	85	1,546	7	304,101,000	230,000	2,158,229	
AMNI INTERNATIONAL PETROLEUM DEVELOPMENT COMPANY LTD	8	67,405,118	3,209,531	3,637,500	8	32,173,849	3,872,491	4,076,497	
DUBRI OIL COMPANY LIMITED	1	1,520,000	-	9,651	0	-	-	-	-
MONI PULO LIMITED	19	185,117,339	-	1,175,348	0	-	-	-	-
NIGER DELTA PETROLEUM RESOURCES LTD (NDPR)	12	224,346,075	-	1,424,420	11	167,413,713	-	-	1,061,529
ORIENTAL ENERGY RESOURCES LIMITED	11	585,258,720	3,657,867	7,373,795	0	-	-	-	-
PILLAR OIL LIMITED	6	19,780,000	-	125,587	0	-	-	-	-
SEPLAT	9	169,500,000	1,093,547	2,169,737	0	-	-	-	-
WALTERSMITH PETROMAN OIL LTD	5	32,266,186	-	204,865	6	65,556,450	-	-	415,677
ENERGIA	0	-	-	-	20	126,382,961	-	-	801,363
CONTINENTAL OIL	0	-	-	-	3	425,906	-	-	2,701
CONOIL	0	-	-	-	2	505,600	-	-	3,206
TOTAL	407	14,152,696,823	13,584,718	103,443,111	268	4,302,089,446	4,354,807	31,633,290	

Figure 3.5.1 Social Expenditure between 2012 and 2013



3.5.2 Infrastructural Project

The Infrastructure Projects set out expenditures on any agreement, or set of agreements involving the provision of goods and services (including loans, grants and infrastructure works), in full or partial exchange for oil, gas or mining exploration or production concessions or physical delivery of such commodities. Such agreement may be in the form of infrastructure or other commitments made by the Licensee.

Full details of the Infrastructure Project expenditures as completed by covered entities in the NEITI 2013 Oil and Gas Industry Audit is contained in **Appendix 3.5.2**

3.5.3 Quasi Fiscal Expenditure

Quasi-fiscal expenditures refer to those expenditures by State Owned Enterprises (NNPC and NNPC Subsidiaries). These are expenditures, which are not directly related to the core business of NNPC as a petroleum company and industry concessionaire. NEITI Oil and Gas audit 2013 sought for the completion of Quasi-Fiscal Expenditure templates from NNPC Subsidiary (NAPIMS). The templates as completed by NAPIMS are contained in **Appendix 3.6.3** of this report

CHAPTER FOUR

4 IN-KIND FLOWS

4.1 Introduction

In kind Flows are non-Financial transactions, under Production Sharing Contracts (PSCs) and Joint Venture Alternative Funding Arrangements. They involve the settlement of Taxes and Royalty liabilities, Carried Party Costs, compensation and loan settlement by means of crude oil allocations, instead of financial payments.

Under PSC arrangement, the Government levies in respect of Royalty and Petroleum Profit Tax (PPT), as well as share of Profit from PSC operations are settled by crude oil allocation to NNPC on behalf of the Federation.

Alternative Funding Arrangement includes Carry /Modified Carry Agreements and Third Party Financing. Capital commitments by the Operators (Carrying Party) on behalf of NNPC are settled through tax offsets and Crude oil allocation for the balance.

4.2 In-Kind Flows under Production Sharing Contract Operations

Production Sharing Contract is an arrangement that allows an International Oil Company to bring in the technology and capital to explore for oil and gas resources, with the hope of recovering its investment and share the rewards with the host National Oil Company (NNPC).

Cost is recoverable with crude oil in the event of commercial finding, with provisions made for:

- Royalty Oil – to meet the Royalty liability due to the Government for the period.
- Tax Oil – to cover the Petroleum Profits Tax liability determined for the period.
- Cost Oil – to meet the PSC Operator's CAPEX and OPEX costs.
- Profit Oil – Shared between NNPC and the PSC Operator on an agreed profit sharing ratio.

Acreages operating under PSC arrangements in 2013 are as classified below:

- 1 Block allocated to Ashland in 1973.
- 19 Blocks allocated in 1990:
 - 12 to Foreign Companies.
 - 7 to Indigenous companies.
- Eighteen blocks allocated to 9 Companies, between 2002 and 2004.
- Forty four blocks were allocated in 2005.
- Fifteen blocks allocated in 2006.

The following are the three sets of fiscal regimes under the PSC:

- The 1993 fiscal regime applicable to PSC agreements signed in 1993 (ITC) & ITA Post July 1998.
- The 2000 fiscal regime applicable to PSC agreements signed in 2000 to 2005 (ITA & cost Uplift).

- The 2005 fiscal regime applicable to PSC agreements signed in 2005 and beyond (R-Factor i.e. high cost penalty applies).

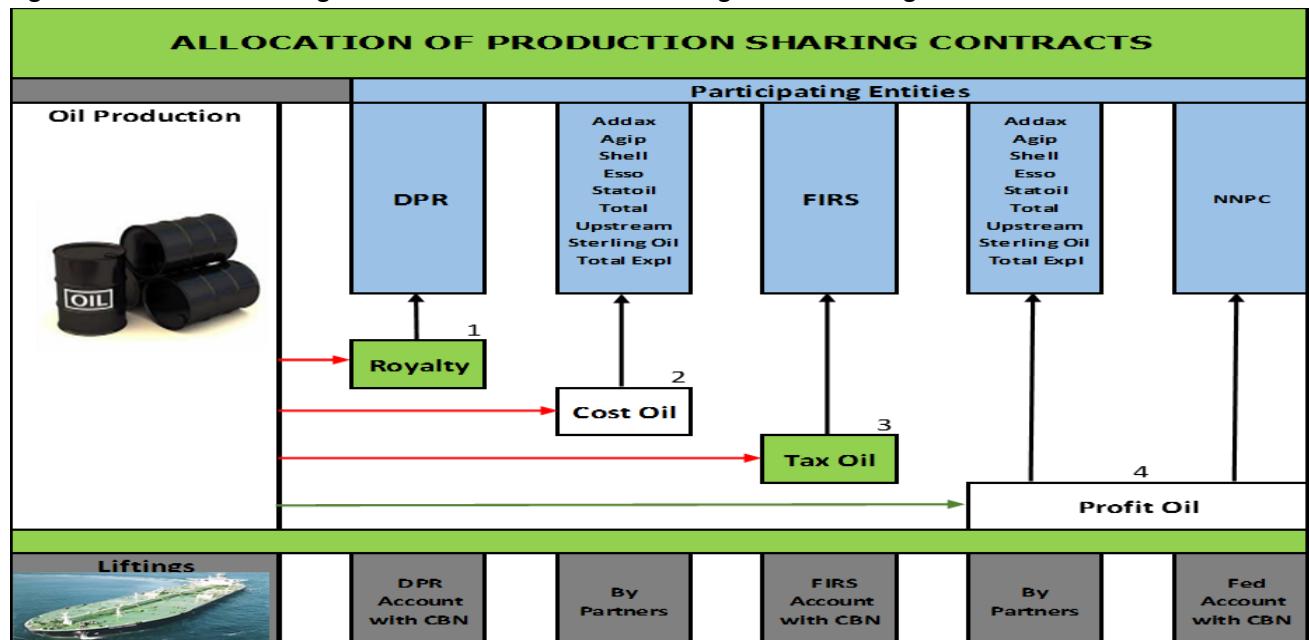
During the year under review, nine (9) Production Sharing Contract arrangements were engaged in exploration and production activities. The details of these PSC Companies are presented below:

Table 4.2 – Production Sharing Contract Companies

S/N	Contractors/Operators	Blocks		Major Fields	Contract Year	1 st Oil Date
		OPLs	OMLs			
1	Addax Petr. Dev.(Nig) Ltd.	98/118	123/124	Antan/Brass	1973/1998	May-98
2	Addax Petr. Expl.(Nig) Ltd.	90/225	126/137	Okwori	1992/1998	Mar-05
3	Nigerian Agip Exploration	316	125	Abo	1993	Apr-03
4	Shell Nig. Expl. & Co.	212	118	Bonga	1993	Nov-05
5	Esso Expl. & Prod. Co.	209	133	Erha	1993	Mar-06
6	Statoil Nigeria Limited	217	128	Agbami Unit Tract 2	1993	Sep-08
7	Total Upstream Nig. Limited	246	130	Akpo Main/Akpo	1998/2005	Mar-09
8	Sterling Oil Expl. & Energy	280	143	Okwuibome	2006	Apr-11
9	Total Expl. Prod. Ltd.	222	138	Usan	1993	Mar-12

Under this arrangement, NNPC lifts crude oil, on behalf of the Federation, in settlement of Contractors' PPT and Royalty liabilities. NNPC-NAPIMS in conjunction with the PSC Companies determine what the Royalty and PPT liability are, for each period, which is based on the PSC Agreements and provisions of the law. Below is a schematic diagram of allocation of Crude Oil Lifting from PSC arrangement.

Figure 4.2 – A schematic diagram of allocation of Crude Oil Lifting from PSC arrangement



4.2.1 Summary of Volume and Value of NNPC Lifting in 2013 from PSC Operations for the Account of DPR and FIRS for Settlement of Royalty and PPT Liabilities

Royalty

A review and validation of the PSC liabilities for Royalty obligation for 2013 period was undertaken. Find below the summary of the volume and value of Royalty and Tax Oil lifted from PSC operations by NNPC.

Table 4.2.1A - Summary of Volume and Value of NNPC Lifting in 2013, for the Account of DPR for Settlement of Royalty Liability as per validation

Month of Lifting	Bbl	Value (\$)	Amount paid (\$)	Difference/Outstanding (\$)
January	500,000	56,123,000.00	56,122,980	20
February	450,000	49,849,200.00	49,849,200	0
March	650,000	70,203,750.00	70,203,750	0
April	650,000	66,947,550.00	66,947,550	0
May	950,000	97,500,500.00	97,500,480	20
June	700,000	73,401,350.00	73,401,350	0
July	1,121,901	122,316,218.16	122,316,218.16	0
August	550,000	61,704,400.00	61,704,400	0
September	300,000	32,841,600.00	32,841,600	0
October	400,000	42,260,800.00	42,260,800	0
November	1,200,000	128,796,800.00	128,796,723.20	76.80
December	250,000	27,838,250.00		27,838,250
Total	<u>7,721,901</u>	<u>829,783,418.16</u>	<u>801,945,051.36</u>	

The above lifting volumes and value have been validated and confirmed to NNPC-COMD crude oil lifting profile and sales documents. The payment for each monthly lifting (except December lifting that was not due for settlement as at 31st December, 2013 as a result of 30 days credit limit) was confirmed to DPR/CBN JP Morgan account.

The lifting volumes were also confirmed to DPR records.

It should also be noted that some lifting transactions were under paid to the tune of **\$116.80** (see table 4.2.1(A) above), which may be due to bank commission. We however, consider this to be immaterial.

Table 4.2.1(B) below is the record of DPR-PSC lifting transactions as per completed populated template returned by NNPC-COMD, which is at variance with validated lifting record shown in table 4.2.1(A) above. This is due to non-population of six lifting transactions. Details are contained in table 4.2.1C. These were validated and confirmed to JP Morgan Crude Oil and Gas Account.

Table 4.2.1B - Summary of Volume and Value of NNPC Lifting in 2013 for the Account of DPR for Settlement of Royalty Liability as per NNPC-COMD returned template

Month of Lifting	Bbl	Value (\$)
January	500,000	56,123,000.00
February	450,000	49,849,200.00
March	650,000	70,203,750.00
April	650,000	66,947,550.00
May	950,000	97,500,500.00
June	700,000	73,401,350.00
July	1,121,901	122,316,218.16
November	800,000	84,331,600.00
Total	<u>5,821,901.00</u>	<u>620,673,168.16</u>

The monthly summary of the omitted liftings are presented in table 4.2.1C below

There were however, two lifting transactions combined in August and one transaction each for the months of September to December, which were omitted in the initial template.

Table 4.2.1C - Summary of Volume and Value of the omitted transactions in the data template submitted by NNPC-COMD

Month	Month of Lifting (Bbls)	Value (\$)
August	550,000.00	61,704,400.00
September	300,000.00	32,841,600.00
October	400,000.00	42,260,800.00
November	400,000.00	44,465,200.00
December	250,000.00	27,838,250.00
Total	<u>1,900,000.00</u>	<u>209,110,250.00</u>

Petroleum Profit Tax (PPT)

A review and validation of the PSC Petroleum Profits Tax (PPT) liabilities for 2013 period was undertaken. Find below the summary of the volume and value of Tax Oil lifted from PSC operations by NNPC.

Table 4.2.1D- Summary of Volume and Value of NNPC Lifting in 2013 for the account of FIRS for settlement of PPT Liabilities

Month of Lifting	Bbl	Value (\$)	Amount Paid (\$)	Difference/Outstanding (\$)
January	7,955,280	911,055,570.08	911,055,550.08	20
February	5,014,569	572,173,743.91	572,173,743.91	
March	8,802,379	957,166,090.39	957,166,070.39	20

Month of Lifting	Bbl	Value (\$)	Amount Paid (\$)	Difference/Outstanding (\$)
April	8,339,406	861,327,519.82	861,328,482.82	(963)
May	5,459,131	574,450,437.14	574,450,377.14	60
June	4,963,894	523,436,632.77	523,436,632.77	
July	6,071,734	656,422,551.53	656,422,500.53	51
August	5,795,257	665,331,917.86	665,331,897.86	20
September	6,717,800	748,470,919.59	748,470,799.59	20
October	5,418,212	592,970,423.32	592,970,393.32	30
November	4,362,220	483,016,724.57	483,016,724.57	
December	4,336,394	483,441,526.03		483,441,526.03
Total	73,236,276	8,029,264,057.01	7,545,823,172.98	

The above lifting volumes and value have been validated and confirmed to NNPC-COMD crude oil lifting profile and sales documents. The payment for each monthly lifting (except December lifting that was not due for settlement as at 31st December, 2013 as a result of 30 days credit limit) was confirmed to FIRS/CBN JP Morgan account.

The lifting volumes were also confirmed to DPR records.

However, some lifting transactions were under paid to the tune of **\$221**, which may be due to bank commission, while April lifting was overpaid by **\$963** (see table 4.2.1D above). We however, consider this to be immaterial.

It should be noted that the total lifting volume of **73,236,276bbl** valued at **\$8,029,264,057.01** in table 4.2.1D above includes June cargo of **999,006bbl** with the corresponding value of **\$106,654,879.57**, erroneously paid by a Customer to NNPC/CBN JP Morgan Crude Oil and Gas Account. The recommendation on this is stated in **section 3.3.15.1**

4.2.1.1 Key findings relating to production Sharing Contract (PSC)

1. NNPC-COMD could not provide a copy of production allocation entitlement model to enable audit test procedure on it application.
2. It was observed that Royalty oil (for Royalty liability) was not lifted by NNPC-COMD from statoil (OML128) and TUPNI (OML 130) in the year under review despite record of crude oil production by the companies. On an audit enquiry, we were informed that Royalty rate is 0% for Statoil and TUPNI as the two assets are beyond 1,000m water depth.

Implication

1. The Federation may be shortchanged from entitlement model or its inappropriate application.
2. Loss of revenue to the Federation as a result of 0% royalty consideration to some companies.

Recommendations

NNPC should make available all information relevant to the NEITI Oil and Gas industry audit while Auditors should sign relevant confidentiality and data protection agreements.

The non-payment of Royalty for water depth above 1000m should be reviewed as companies operating in such water depths are already making huge profits especially as technology to exploit in such water depths are now readily available unlike the past.

NNPC Response:

NNPC entitlement computation models are available for review and evaluation to any interested party should the need arise. The templates are encrypted and resident on selected workstations in order to maintain security, propriety and integrity of our data.

4.3 Joint Venture Alternative Funding Arrangements

The traditional method for funding Joint Venture Operations, as provided in the Joint Operating Agreement (JOA) is the Cash Call. The Joint Operating Agreement – JOA, is the legal framework that defines the working relationship between the NNPC and its joint venture partners.

The JOA defines Cash Call as the amount, which the parties to the Joint Venture Agreement must pay into the Joint Account, in order to meet their respective participating interest. This includes share of both the Capital Expenditure (CAPEX) and Operating Expenditure (OPEX).

As a result of the Federal Government inability to meet up with its Cash Call obligations on a timely basis, various Alternative Funding Arrangements have been entered into with some Joint Venture Companies to provide the funds needed to enable the running of oil and gas operations of certain fields.

In the late 1980s/early 1990s, Crude Swap Arrangements were resorted to, whereby the Operator funded NNPC's share of Cash Call requirements and thereafter lifted NNPC's share of production from the related field, to sell and meet the Cash Call default. However, the current forms of Alternative Funding Arrangements are in two broad categories, namely:

- Third Party Financing
- Carry Agreements and Modified Carry Agreements (MCAs).

4.3.1 Third Party Financing

This involves the creation of a Special Purpose Vehicle (SPV) by the JV Partners, who assign the right of future production from the approved selected project to the SPV. The SPV enters into a long-term Sales and Purchase Agreement with off takers (buyers), which is used as security for the loan required for financing the selected project. Proceeds from the sale of the crude oil/gas are remitted to a dedicated "proceeds account", domiciled with the lending bank. Payments are made from this account for:

- Debt Service (Principal and Interest) and any other loan requirement
- Balance in the account is shared in accordance with the JV equity holding

Under this form of Alternative Arrangement, the Joint Venture Partners identify an approved project, which requires third party financing. The project is then isolated from the entire JV operations. A Special Purpose Vehicle (SPV) is created by the JV Partners, which acts as the borrower. A Bridge Loan or Facility agreement is drawn up between the SPV and the project Financiers or Bridge Lenders. The Loan facility has a principal and interest component. There are also loan administrative expenses that must be paid. Proceeds from the sale of the crude oil/gas are remitted into the Escrow Account already opened, and funds are disbursed from the account for payment of the Third Party loan principal, together with the related Interest and administrative expenses. Balance in the Escrow Account (if any), is shared by the JV partners, in accordance with their respective JV equity holding.

The current Third Party financed projects are as follows:

- Natural gas Liquids Project (NGL 2).
- Satellite Field Development Project.
- Reserve Development Project.

4.3.2 Overview of NGL 1 And 2 Projects and Performance Profile as at 31st December, 2013

Project Background

The Natural Gas Liquids (NGL) Project is a JV project between NNPC and MPNU, under the NNPC/MPNU Joint Venture. The entire project is made up of two parts – NGL 1 and NGL 2. NGL 1 had a total project cost of **\$810 million**, and was funded via Equity Contribution from the sponsors. The NGL 1 facility was commissioned in 1998, and commenced commercial export in 1999.

NGL 2 Facility, on the other hand, is an expansion of NGL 1 production and export facilities. It commenced production in March 2008. NGL 2 was, and is still being funded through Third Party Finance, and it is structured in such a way that the MPNU retains **51%** and NNPC has **49 %**.

Table 4.3.2A - Summary of NGL 2 funding history

Year	Description	Amount (USD\$ Billion)
2004	Initial Funding (\$1.406 billion): <ul style="list-style-type: none">• Sponsors' equity• International Lenders• Local Lenders Total Initial Funding	0.131 1.173 0.102 1.406
2008	Supplemental Cost Financing by Local banks	0.220
2009	Loan Re-sizing (\$265 million): <ul style="list-style-type: none">• UBA• SCB	0.150 0.015 0.100

Year	Description	Amount (USD\$ Billion)
	• Exxon Mobil Total Loan re-sizing	0.265
2010	Additional Loan	1.100

Note that the Supplemental Loan of **USD\$220 million** was re-sized to **USD\$265 million** in 2009, and taken over by a new set of financiers, as listed above.

The total funding for NGL 2, as at 31st December, 2013, including the Sponsor's initial equity contribution was, **USD\$2.771 billion** (i.e. \$Billion: 1.406 + .220 + .045 +1.100).

Table 4.3.2B - Summary of NGL 2 Loan profile as at 31st December, 2013

Description	Senior Loan (\$'M)	Additional Loan (\$'M)
Principal Advanced	1,275.5	1,100
Principal repayment	1,225.95	255.53
Interest payment	377.22	116.49
Outstanding principal	49.55	844.47
NNPC's Exposure @ 49%	24.28	413.79

4.3.3 Summary of revenue earned as at 31st December, 2013 from NGL 2

The summary of the revenue derived from NGL 2 as presented by NNPC is shown in the table below:

Table 4.3.3 - Summary of revenue earned in 2013 from NGL 2 project

Description	USD \$'M
NNPC Share of Revenue earned in 2013	300.839
Amount not due for payment as at 31 st December, 2013	(73.724)
Remittance into JP Morgan Gas revenue a/c	(109.780)
Amount retained in the Proceeds A/c	<u>117.335</u>

4.3.3.1 Key finding on NGL 2 project

The revenue sharing structure of 51% and 49% for MPN and NNPC respectively does not confer commercial fairness to the Federation whose interest in MPN JV is 60%. There is no evidence to suggest that MPNU is bearing additional costs to warrant a change from the original JV participation ratio.

Implication

The net cash flow to the Federation from third party financed projects is very insignificant when compared to the project gross revenue flows and also not in accordance with the equity participation of the JV partners.

Recommendation

NNPC should always ensure that there is commercial fairness to the Federation whenever loan agreements are entered with third parties.

NNPC's Response

The structure of 51% to MPNU and 49% to NNPC is as requested by the Guarantor to the loan deal – Overseas Private Investment Corporation (OPIC).

4.3.4 Satellite Field Development Project (SFDP)

The Satellite Field Development project (SFDP) is a Joint Venture project set up to fund and develop up to 22 undeveloped oil and gas fields. The Project was set up in Phase I and Phase II is a roll-over of Phase I. NNPC and MPNU lifting revenue from this project are deposited into an offshore account and used for periodic debt services after which the balance is transferred to the JV Partners' (NNPC & MPNU) designated accounts after meeting the necessary conditions.

Presented below is a summary of the Satellite Field Project Revenue flow in 2013:

Table 4.3.4 - Satellite Field Development Project

<u>Month of Lifting</u>	<u>Bbl</u>	<u>Value (\$)</u>
March	912,326.00	100,925,151.42
September	1,900,157.00	214,071,821.00
October	1,938,777.00	209,818,305.08
November	950,080.00	103,302,198.40
Total	<u>5,701,340.00</u>	<u>628,117,475.90</u>

The total crude oil lifted from the project by NNPC-COMD was **5,701,340 bbls** valued at **\$628,117,475.90**. This has been confirmed to NNPC-COMD lifting schedule. The lifting volume has also been confirmed to NNPC-COMD record of monthly allocation (between NNPC and partners) of crude oil lifting from production volumes. The sales value of **\$100,925,151.42** for March lifting was traced and confirmed to the CBN/NNPC JP Morgan Crude Oil and Gas (Dollar) Revenue Account, while the balance of **\$527,192,324.48** from the total liftings of **\$628,117,475.90** was retained in Proceeds Accounts in line with loan agreement.

4.3.5 Reserve Development Project (RDP)

The Reserve Development Project (RDP) was set up for the construction and drilling of 27 oil wells in 10 Joint Venture assets with Mobil Producing Nigeria Unlimited. The total cost of the RDP was **\$1.5billion** which was sourced as loans from both Nigerian and international commercial banks. The table below shows summary of lifting volume and value from RDP in 2013.

Table 4.3.5 - Reserve Development Project

<u>Month of Lifting</u>	<u>Bbl</u>	<u>Value (\$)</u>
February	949,926.00	106,870,474.70
March	950,349.00	103,779,061.15
April	950,057.00	96,153,368.86
June	949,803.00	101,237,602.16
July	997,397.00	110,028,847.45
August	950,279.00	107,924,136.31
September	950,279.00	107,352,743.90
October	950,279.00	109,574,366.83
Total	<u>7,648,369.00</u>	<u>842,920,601.36</u>

The total crude oil lifted from the Project was **7,648,369 Bbls** with sales value of **\$842,920,601.36** (as shown in the table above), out of which the total sum of **\$300,000,000** was traced and confirmed to CBN/NNPC JP Morgan Crude Oil and Gas (Dollar) Revenue Account. However, the total balance of **\$542,920,601.36** was retained in proceeds accounts in line with loan agreement. The crude oil lifting as summarized in the above table has also been validated and confirmed to NNPC-COMD schedule of crude oil lifting and NNPC-COMD record of monthly allocation (between NNPC and partners) of crude oil lifting from production volumes in 2013.

4.3.6 Carry Agreements

This is an Alternative Funding arrangement in which Joint Venture (JV) Partner(s) in addition to its equity contribution for the execution of Capital Projects, carries NNPC's equity contribution, in form of a loan, which is payable through tax offsets (Carry Tax relief) and in-kind (i.e. crude oil), for balance of Carry Cost (Carry Oil) and Profit share (Share Oil).

Under this arrangement, the Operator agrees to carry the non-operator, and bears the cost of the CAPEX portion of the project on behalf of the NNPC. This arrangement allows for financing based on cost estimates. However, there is no dedicated account established for carry proceeds. The Operator lifts NNPC's share of crude oil produced from the project, to meet the residual Carry Cost, after the Carry Tax Relief (CTR) has been set off from the total Carry Cost.

NNPC had no control over the sales proceeds realized from the disposal of the crude oil and gas lifted by the Operator to meet the Carry Cost (Carry Oil) and compensation (Share Oil) due to the Operator. Consequently, the traditional carry arrangement is no longer attractive to NNPC as an alternative funding arrangement, and has, therefore, given way to the Modified Carry Agreement (MCA) model.

4.3.7 Modified Carry Agreement

This arrangement is very similar to the Carry Agreement described above. However, NNPC lifts and markets the Carry Oil and Share Oil, due to the Carrying party, and pays cash to the operator for the cash financing provided. The Carrying party recovers the Carry Capital Cost (CCC) in Dollars. An Escrow Account is opened, and the sales proceeds with respect to the Carry oil and Share oil are paid into the Escrow Account. NNPC's Portion of the Agreed Capital Cost approved by the Joint venture partners is financed by the Operator through monthly cash call payments into a dedicated account for the project.

In other word, Modified Carry Agreement (MCA) is a modification of the existing Carry Agreement (CA). In this case, the recovery of the full capital cost is made through tax offsets (Carry Tax Relief), by the carrying party, and the balance of the carry cost (Carry Oil) is lifted by NNPC, and cash remitted to the Carrying Parties' account.

In order to compensate the Carrying Party for providing the finances to meet the Carried Party's share of approved capital cost, an interest rate designed to yield a financial internal rate of return (FIRR) of 8% is factored into the financial model for the project.

The project monthly Cash Call requests are approved by the NNPC- NAPIMS who issues written Mandate to the Carrying Party to fund the cash call due. The Carrying Party pays NNPC's portion of the approved Cash Call request (CAPEX portion) into the Carry Proceeds Account dedicated for the Carry project, and jointly controlled by the JV parties. From this Account, funds are swept daily into the JV Construction Account based on a one time standing instruction to sweep funds from the Carry Proceed Account into the JV Construction Account. In other words, the Carry Proceeds Account is a zero daily balance account. The Carrying Party is expected to pay its own equity share of the Cash Call due into the JV Construction Account the same day, as money is swept from the Carry Proceeds Account into the JV Construction Account. From the JV Construction Account, the capital costs of the project are settled as at when due.

The recovery of the Carry Capital Cost and Compensation by the Carrying Party is through tax offsets, and the Carried Party's share from the project is as follows:

- a. 85% of the Carry Capital Cost is recovered through tax offsets, by transferring NNPC's tax benefits to the Carrying Party.
- b. The balance 15% of the Carry Capital Cost is recovered from NNPC's equity production.

A principal distinguishing feature of MCA is that NNPC is the only party that lifts and markets the Carrying Party in settlement of the Carry Capital Cost (CCC) and the Compensation.

There are 13 active MCAs contracts. However, production of Crude Oil or Gas were made from 9 contracts (See: S/N 1,2,3,4,5,9,10,11 and 13 in the table below) in 2013 according to NNPC-COMD record. Below is the schedule of active MCAs contracts.

Table 4.3.7 - Schedule of active MCAs contracts

S/N	CONTRACT NAME	OPERATOR	COMMENCEMENT DATE	STATUS
1	2007-2009 MPN BUNDLE	MPN	2009	ACTIVE
2	2010 DRILLING BUNDLE	MPN	2010	ACTIVE
3	2010 OSO RE/CONDENSATE	MPN	2010	ACTIVE
4	GBARAN-UBIE	SPDC	2008	ACTIVE
5	NEMBE CREEK BUNDLE	SPDC	2008	ACTIVE
6	CAWTHORNE CHENNEL	SPDC	2009	ACTIVE
7	GBARAN-UBIE PHASE 2	SPDC	2012	ACTIVE
8	TNP BUNDLE	SPDC	2012	ACTIVE
9	NLNG T4/T5	NAOC	2009	ACTIVE
10	BENIBOYE/EBOCHA	NAOC	2010	ACTIVE
11	OML 58 UPGRADE	TEPNG	2009	ACTIVE
12	OFON PHASE 2	TEPNG	2009	ACTIVE
13	2008 CHEVRON	CHEVRON	2009	ACTIVE

4.3.8 Validation of MCA transactions in 2013

A comprehensive review of the Modified Carry Agreement (MCA) transactions for 2013 was carried out, with a view to identifying the JVs involved and the number of MCA projects being executed by each JV, and their performance in 2013.

During the course of validation, we also verified crude oil and gas lifted in 2013 under each of the MCA projects and traced Government Take, regarding payment of MCA Royalty Oil and PPT Oil to the respective DPR and FIRS accounts.

4.3.9 Summary of Royalty Oil and Tax Oil Revenue Derived by the Federation from MCA Projects in 2013

Presented in Table 4.3.9(A) below is a summary of the Royalty revenue flows to the Federation from MCA projects in 2013.

Table 4.3.9A - Summary of Royalty Oil Revenue Derived by the Federation from MCA Projects in 2013

Month of Lifting	Bbl	Value (\$)	Amount Paid (\$)	Outstanding (\$)
January	35,039	4,040,145.29	4,040,145.29	
February	40,000	4,473,480.00	4,473,480.00	
March	158,754	17,358,003.79	17,358,003.79	
April	213,672	22,369,377.86	22,369,377.86	
May	60,495	6,366,729.49	6,366,729.49	
June	93,795	10,038,998.73	10,038,998.73	
July	156,595	17,338,881.08	17,338,881.08	
August	172,685	19,336,812.62	19,336,812.62	
September	8,510	948,541.63	948,541.63	
October	100,170	11,239,749.71	11,239,749.71	
November	17,480	1,923,768.60	1,923,768.60	
December	174,295	19,287,178.81		19,287,178.81
Total	1,231,490	134,721,667.61	115,434,488.80	19,287,178.81

The above table shows that the total sales value of MCA Royalty Oil lifted in 2013 was **\$134,721,667.61**, out which **\$115,434,488.80** was traced to DPR/CBN JP Morgan Account, as the balance of **\$19,287,178.81** was not due for settlement as at 31st December, 2013.

Presented in Table 4.3.9(B) below is a summary of the Tax revenue flows to the Federation from MCA projects in 2013.

Table 4.3.9B - Summary of Tax Oil Revenue Derived by the Federation from MCA Projects in 2013

Month of Lifting	Bbl	Value (\$)	Amount Paid (\$)	Outstanding (\$)
January	131,207	15,128,706.22	15,128,706.22	-
February	136,000	15,209,832.00	15,209,832.00	-
March	559,972	61,239,899.11	61,239,899.38	
April	760,616	79,561,850.69	79,561,850.69	-
May	226,529	23,840,820.83	23,840,820.83	-
June	356,726	38,183,738.85	38,183,738.85	-
July	580,593	64,274,967.00	64,274,967.00	-
August	622,777	69,746,475.87	69,746,475.87	-
September	31,866	3,551,903.82	3,551,903.82	-
October	366,205	41,108,443.99	41,108,443.99	-
November	62,492	6,879,539.94	6,879,539.94	-
December	646,599	71,547,870.41	-	71,547,870.41
Total	4,481,582	490,274,048.72	418,726,178.31	71,547,870.41

Validation/confirmation of payments to FIRS/CBN JP Morgan account shows that all the sales value (except \$71,547,870.41 not yet due for settlement as at 31st December, 2013) for MCA Tax Oil lifted in 2013 were confirmed. It should be noted that the analysis of lifting in respect of MCA tax oil above includes **\$6,167,986.36** MCA Education Tax (EDT).

4.3.10 Summary of MCA Revenue from Crude Oil and Gas Liftings in 2013 and its Distribution

Presented in Table 4.3.10A and 4.3.10B below are the summaries of the revenue flows from sales of (Crude Oil and Gas) MCA projects in 2013, and their distribution.

Table 4.3.10A - MCA Crude Oil Revenue and its Distribution

<u>Joint Venture</u>	<u>Volume (Bbl000)</u>	<u>Value (\$'000)</u>	<u>FIR- PPT (\$'000)</u>	<u>DPR- ROYALTY (\$'000)</u>	<u>EDU Tax (\$'000)</u>	<u>Carry+ Share (\$'000)</u>
NNPC/MPN JV	3,342	363,938	252,118	67,328		44,491
NNPC/NAOC JV	1,003	110,757	75,315	22,151		13,291
NNPC/CNL JV	604	67,169	45,101	12,426	3,089	6,553
NNPC/SPDC JV	1,503	164,077	111,573	32,815	3,078	16,611
Total	<u>6,452</u>	<u>705,941</u>	<u>484,107</u>	<u>134,720</u>	<u>6,167</u>	<u>80,946</u>

The above summary has been validated to the NNPC-COMD crude oil sales profile and source documents. It was observed that August total MCAs lifting volume of **64,000bbl** valued at **\$7,307,328** from NNPC/CNL JV was not included in the populated template. We also carried out further validation of lifting volumes to NNPC-COMD record of monthly allocation (between NNPC and partners) of crude oil lifting from production volumes and confirmed that the crude oil volumes due to the federation have been accounted for.

The breakdown of the above MCA crude oil revenue, on project by project basis, is presented in **Appendix 4.3.10A** of this report.

Table 4.3.10B - MCA Gas Revenue and Distribution

<u>Joint Venture</u>	<u>Volume (Mbtu'000)</u>	<u>Value (\$'000)</u>	<u>FIRS-CIT (\$'000)</u>	<u>DPR- ROYALTY (\$'000)</u>	<u>EDU Tax (\$'000)</u>	<u>Carry (\$'000)</u>	<u>Share (\$'000)</u>
NNPC/TEPNG JV	24,439	63,947	17,841	4,476	584	21,571	19,474
NNPC/NAOC JV	12,745	30,626	8,545	2,144	624	9,405	9,905
NNPC/SPDC JV	70,869	167,471	46,725	11,723	3,468	25,413	80,143

<u>Joint Venture</u>	<u>Volume (Mbtu'000)</u>	<u>Value (\$'000)</u>	<u>FIRS-CIT (\$'000)</u>	<u>DPR- ROYALTY (\$'000)</u>	<u>EDU Tax (\$'000)</u>	<u>Carry (\$'000)</u>	<u>Share (\$'000)</u>
Total	<u>108,053</u>	<u>262,044</u>	<u>73,111</u>	<u>18,343</u>	<u>4,676</u>	<u>56,389</u>	<u>109,522</u>

It should be noted that the volume in the above table is as determined by NNPC and obtained by dividing Gas Value by the average Unit price. i.e. (Value/unit price of Gas = Volume) and this may be different from actual volumes recorded by the IOCs.

The breakdown of the above MCA gas revenue on project-by-project basis is also presented in the **Appendix 4.3.10B** of this report.

4.3.10.1 Key findings on Modify Carry Agreement

The recovery of the Carry Capital Cost and Compensation by the Carrying Party through tax offsets of 85% of the Carry Capital Cost.

Implication:

Federation may be losing revenue through over statement of capital cost by the carrying company.

Recommendation:

NNPC-NAPIMS to ensure periodic and timely verification of capital cost claimed by the company and also conduct value for money audit in order to assess the benefit accruable from MCAs. NNPC and the IOCs should also ensure full and periodic reconciliation of Gas Volumes in order to avoid reporting different Volumes and Values.

CHAPTER FIVE

5 JOINT DEVELOPMENT ZONE - SÃO TOMÉ AND PRÍNCIPE (STP) AND NIGERIA

The Governments of São Tomé and Príncipe (STP) and Nigeria signed a 45-year Treaty on February 21st, 2001 establishing the Joint Development Zone (JDZ) in order to address issues relating to overlapping maritime boundaries.

In line with the signed Treaty, coordinates and blocks define the JDZ and a resource sharing formula of 60% to Nigeria and 40% to STP was agreed. PwC was appointed Independent Reconciler of the Joint Development Zone (JDZ) for the period covering 1st January 2003 to 31st December 2013.

According to the PwC report, confirmations were received from Stakeholders which include Joint Development Authority, Nigerian Government, Central Bank of São Tomé and Príncipe, Ministry of Planning and Finance of São Tomé and Príncipe, Addax, Sinopec, Equator Exploration, Dangote, Afren PLC, Petroleum Geo-Services (PGS), DNO/EER, Atlas Petroleum, Exxon Mobil, Total, and Anadarko.

Full details of the Independent Reconciler's report can be found at:

[https://eiti.org/files/First%20Report%202003-2013%20\(Nigeria-Sao%20Tome%20and%20Principe\).pdf](https://eiti.org/files/First%20Report%202003-2013%20(Nigeria-Sao%20Tome%20and%20Principe).pdf)

CHAPTER SIX

6 COMPANY LEVEL FINANCIAL FLOWS

Company level financial flows pertains to the record of individual company payments made to the Government and this is ascertained by comparing the initial templates submitted by the Oil and Gas operating companies with the templates from government agencies. The payments are validated through payment documents, receipts, bank statements and other corroborative evidences and differences are subsequently reconciled.

For the year under review, all financial flows reported as payment by the Oil and Gas Companies are as confirmed receipt by the respective receiving Government Agencies.

In-Kind financial flows not involving cash payments as in the case of PSCs and MCAs are recorded in the value of actual Crude Oil Liftings for the year under review since it can be safely assumed that payment has been made by the companies concerned as at the time of lifting by NNPC. All In-Kind payments have been confirmed to NNPC records and validated to CBN statements of accounts. The above explains the difference that might arise in the In-Kind flow figures and actual cash remittance by NNPC into CBN accounts from the liftings within the year.

6.1 Petroleum Profit Tax (PPT)

The PPT payments by the companies are shown according to the operating arrangements in **Table 6.1 below:**

Table 6.1 Petroleum Profit Tax (PPT)

S/N	ENTITY	PPT
		USD \$'000
1	AMNI	45,466
2	CHEVRON	550,309
3	CONOIL	45,139
4	CONTINENTAL	92,608
5	FHN	2,059
6	MOBIL	2,715,242
7	MONIPULO	19,033
8	NAOC	288,501
9	ND WESTERN	443
10	NEWCROSS	999
11	NPDC	192,000
12	PANOCEAN	450
13	PHILLIPS	64,270
14	PILLAR	850
15	PLATFORM	1,976
16	SEPLAT	94,439
17	SPDC	1,358,054

S/N	ENTITY	PPT
		USD '\$000
18	STATOIL	1,070,531
19	TEPNG	773,061
20	WALTERSMITH	2,226
PSC		
21	APDNL	476,828
22	APENL	328,679
23	ESSO	2,167,730
24	NAE	291,840
25	SNEPCO	2,397,603
26	STAR DEEP	2,341,380
27	TEPNG USAN	40,079
28	TUPNI	1,745,608
MCA		
29	CHEVRON MCA	45,101
30	MOBIL MCA	252,118
31	NAOC MCA	75,315
32	SPDC MCA	111,573
TOTAL		17,591,512

*of the total payment of \$2,341,380 made by stardeep, only \$1,498,489 is the actual payment of PPT for stardeep while, \$842,887 was payments made on-behalf of FAMFA & PETROBRASS in 2013.

In 2013, the total Petroleum Profit Tax payment by all companies amounted to **\$17,591,512,000** showing a decline of **7%** when compared to PPT payment in 2012. Several factors may be attributable for the decline such as; lower production in 2013, granting of pioneer status to marginal field operators and poor collection rate by FIRS.

6.2 Royalty Oil

The Royalty payments by the companies are shown according to the operating arrangements in Table 6.2 below.

Table 6.2 Royalty Oil

S/N	ENTITY	Royalty Oil
		USD '\$000
JOINT VENTURES		
1.	SPDC	748,647
2.	MOBIL	1,296,571
3.	CHEVRON	720,754
4.	NAOC	213,007
5.	TEPNG	656,729

S/N	ENTITY	Royalty Oil
		USD \$'000
6.	PANOCEAN	9,951
SOLE RISK/MARGINAL FIELD		
7.	AMNI	74,593
8.	ATLAS	5,827
9.	CONOIL	9,475
10.	CONTINENTAL	118,148
11.	DUBRI	711
12.	ENERGIA	1,759
13.	FHN	10,461
14.	MIDWESTERN	23,807
15.	MONIPULO	27,478
16.	ND WESTERN	34,701
17.	NDPR	1,134
18.	NECONDE	29,140
19.	NPDC	722,943
20.	ORIENTAL ENERGY	185,972
21.	PHILLIPS	85,044
22.	PILLAR	619
23.	PLATFORM	885
24.	SEPLAT	151,532
25.	SHORELINE NATURAL RESOURCES	57,364
26.	WALTERSMITH	1,900
PRODUCTION SHARING CONTRACTS		
27.	APDNL	290,491
28.	APENL	163,382
29.	ESSO	15,735
30.	NAE	74,995
31.	SEEPSCO	72,000
32.	SNEPCO	65,627
33.	TEPNG USAN	176,217
MODIFIED CARRY AGREEMENTS		
34.	CHEVRON	12,426
35.	MOBIL	67,328
36.	NAOC	22,151
37.	SPDC	32,815
	TOTAL	6,182,319

Total Royalty Oil payments amounted to **\$6,182,319,000** compared to **\$6,725,282,000** paid in 2012 representing a **8%** decline in payment. This is attributable to the decline in production during the year and lower collection rates by the DPR.

6.3 Royalty Gas

Table 6.3 Royalty Gas

S/N	ENTITY	Royalty Gas
		\$'000
1	CHEVRON	10,884
2	NAOC	18,009
3	NAOC MCA	2,144
4	PHILLIPS OIL	9,850
5	SEPLAT	1,613
6	SPDC	33,241
7	SPDC JV MCA*	11,723
8	TEPNG	27,153
9	TEPNG MCA	4,476
	TOTAL	119,093

*the financial flow represents the payment for all the parties in the JV arrangement.

Total Royalty Gas payments amounted to **\$119,093,000** compared to **\$112,389,000** paid in 2012 representing an **6%** increase in payment. The increase agrees with our findings on improved Gas utilization during the year under review.

6.4 License Fees and Concession Rentals

Oil and Gas companies pay concession Rentals as rent on oil blocks for which they have been granted concession. There are two categories of Rentals, which are:

- Oil Prospecting Licenses (OPL)
- Oil mining Lease (OML)

The license is non-exclusive and is granted for a period of one year. It is renewable annually.

The applicable rental rates are;

- OPL - US\$10/SQ KM or part there Off (Non-Producing Block)
- OML- US\$20.00/SQ KM or part there Off (up to 10 years of Conversion) and US\$15.00/SQ KM or part there off (until the Expiration of the Lease)

There are other Licenses that are granted by DPR apart from the OPLs and OMLs, this include license for the operation of refineries, filling stations and costal vessel licenses. These licenses are renewable on an annual basis.

Table 6.4 License Fees and Concession Rentals

S/N	License Fee and Concession Rentals	
	Entity	US\$'000
1	ATLAS	15
2	CAVENDISH	19
3	Chevron	133
4	Dubri	1,430
5	MOBIL	52
6	Newcross	10
7	Panocean	10
8	SEPLAT	40
9	SPDC	324
10	STAR DEEP	26
11	TEPNG	131,640
12	Waltersmith	50
	TOTAL	133,750

Total License fees and Concession Rentals paid in 2013 amounted to **\$133,750,000**, an increase of **4520%** compared with **\$2,895,000** paid in 2012. TEPNG accounts for over 98% of the total payment and the significant increase in the payment recorded in 2013 was as a result of payments relating to previous years outstandings.

6.5 Company Income Tax (Gas)

Table 6.5 Company Income Tax (Gas)

S/N	ENTITY	CIT (GAS)
		USD\$'000
1	MOBIL	117,447
2	NAOC MCA	8,545
3	PHILLIPS OIL	48,280
4	SEPLAT	7,314
5	SPDC	148,104
6	SPDC MCA	46,725
7	TEPNG	161,795
8	TEPNG MCA	17,841
	TOTAL	556,050

There was a rise of **26%** in Company Income Tax (Gas) reported in 2013 as against **\$441,048,000** reported in 2012. This is also corroborative of the increased Gas utilization during the year under review.

6.6 Cash Call

6.6.1 Introduction

Nigerian National Petroleum Corporation (NNPC) operates a joint venture relationship with International oil companies in the exploration and exploitation of Nigeria's oil reserves.

National Petroleum Investment Management Services (NAPIMS) is the division of NNPC charged with the management of the Federation's investment in the Oil and Gas Joint Venture Operations

The JV Operators are:

- Shell Petroleum Development Company (SPDC)
- Mobil Producing Nigeria Unlimited (MPNU)
- Chevron Nigeria Limited (CNL)
- Total Exploration and Production Nigeria Limited (TEPNG)
- Nigerian Agip Oil Company Limited (NAOC)
- Pan Ocean Oil Corporation (Nigeria Limited (POOCN))

The structure of the Joint Venture arrangements with the IOCs mentioned above and their participating interests are shown in table 6.6.1 below:

Table 6.6.1: JV Participating interests

S/NO	JV	OPERATOR	PARTICIPATORY INTEREST								
			NNP%	SPD%	MOB%	CHEVRC%	TOTAl%	NAO%	POCN%	POOC%	
1.	SPDC JV	SPDC	55	30	-	-	10	5	-	-	
2.	MOBIL JV	MOBIL	60	-	40	-	-	-	-	-	
3.	CHEVRON JV	CHEVRON	60	-	-	40	-	-	-	-	
4.	TEPNG JV	TOTAL E&P	60	-	-	-	40	-	-	-	
5.	NAOC JV	NAOC	60	-	-	-	-	20	20	-	
6.	PAN OCEAN JV	PANOCEAN	60	-	-	-	-	-	-	40	
7.	NPDC/CHEVRON J	NPDC	60	-	-	40	-	-	-	-	
8.	NPDC/SPDC JV	NPDC	55	30	-	-	10	5	-	-	

See Appendix 6.6.1A for the list of OMLs managed in each JV.

The JV arrangements in S/NOs 7 and 8 in Table 6.6.1 above arose from NNPC exercising its right under the JOA to appoint its upstream subsidiary-Nigerian Petroleum Development Company

(NPDC) to manage the operatorship of certain fields. The exercise of this right, which is not intended to change the ownership or participatory interest ratio, gave rise to the following two arrangements or subsidiary JVs:

I. NNPC (NPDC)/SHELL/TEPNG/NAOC

The OMLs transferred by SPDC to NPDC under this change of operatorship arrangement are OMLs 13 and 20. OML 13 is licensed to operate within Utapate field while OML 20 operates within Egbema, Egbema West and Ugada fields.

II. NNPC (NPDC)/CHEVRON

The OMLs transferred by CNL to NPDC from the CNL JV are OMLs 49 and 51. The OMLs are licensed to operate within Aroh and Oghareki fields.

The transfer of Operatorship has invariably created two additional JV relationships to which cash calls are paid in addition to the six shown in Table 1.3 (JV Participating interests) above. NNPC however remains the interest holder in these JV relationships.

As at 2013, OML 13 (SPDC JV) was not producing while OMLs 20, 49 and 51 were producing. Production from OMLs 20, 49 and 51 is attached in the **Appendix 6.6.1B**. It is to be noted that, the Federation equity in OML 60, 61, 62 and 63 were assigned to NPDC (**Appendix 6.6.1C**) in December 2012.

6.6.2 Cash Call Request, Budgeting and Approval Process

Cash calls are based on the Annual Work Programme of each Joint Operation and covers such diverse areas as Exploration, Drilling, Production, Development, Construction, Engineering Facilities, Technical Materials, for both crude oil and gas, in addition to administrative overheads, referred to as OPEX.

On receipt of the Cash Call, NNPC summons a meeting of the Cash Call Processing Committee where unacceptable items of cost are rejected and the net value accepted by the Committee is signed by all parties i.e. NNPC and other Partners including the Operator. The IOCs are members of the Cash Call Processing Committee.

The work programme is agreed in advance among the Joint Partners and approved by their Operating Committees (OPCOM) as provided in the JOA. The OPCOM is constituted in accordance with the JOA as the highest decision making authority and is charged with the overall supervision, control and direction of all matters pertaining to the Joint Operations.

Cash Calls are initiated monthly by the JV Operator and served on NNPC and other Partners early enough to enable NNPC and all Partners including the Operators to lodge their equity portions of the Cash Calls into the JV Dollar and Naira Cash Call Bank Accounts on or before the 1st day of the Cash Call month.

NNPC has prying and audit rights over all these Accounts, but the custody and transactional authority over these Joint Operating Bank Accounts rests with the Operators.

6.6.2.1 2013 Budget for Cash Call Items

The Budget Office of the Federation always conveys to NNPC the approved spending limits for Cash Call activities of each year in absolute value (Dollars).

Table 6.6.2.1: 2013 Budget for Cash Call Items

2013 NATIONAL ASSEMBLY APPROVED BUDGET		
	N'000	EQV \$'000
JV CASH CALLS (CRUDE OIL)	858,588,000.00	5,366,175.00
NATIONAL DOMESTIC GAS DEVELOPMENT	209,150,000.00	1,307,187.50
TOTAL	1,067,738,000.00	6,673,362.50

Note: The dollar was translated at the National Assembly exchange rate given by CBN at **\$1.00 to 160NGN**.

The approved limit so conveyed hardly ever tallies with the Annual Budget request of NNPC. Therefore on receipt of this approved limit, which is now the approved Cash Call Budget for the year, NNPC splits the amount among the JV partners after due process of consultations and meetings.

The Initial Annual Budget for 2013 is shown in Table 6.6.4.1 below. The Budget below was further distributed by NNPC in dollars for 2013 for each JV as per Crude Oil, DOMGAS and LNG Brass Supply.

6.6.3 CBN/NNPC Cash Call Funding

The total funding in 2013 from JP Morgan Chase Oil and Gas Revenue Account (in dollars) for both Naira and Dollar request by NNPC through NAPIMS are as stated below:

Table 6.6.3A - 2013 Total Cash Call Funding in Dollar

	\$
Total funding from JP Morgan Oil and Gas Revenue Account	7,277,349,866.46
Net Interest Credit for Current Period	372,048.38
Total funding into JP Morgan CBN JVCC Account	7,277,721,914.84

Source: JPMorgan Chase CBN Cash Call Joint Venture Account

Table 6.6.3B: Comparison of Cash Call Account Funding for 2012 and 2013 in Dollar

	2012	2013	INCREASE/ (DECREASE)
	\$	\$	\$
Total funding from JP Morgan Oil and Gas Revenue Account	7,310,861,360.62	7,277,349,866.46	(33,511,494.16)
Net Interest Credit for Current Period	998,881.77	372,048.38	(626,833.39)
Total funding into JP Morgan CBN JVCC Account	7,311,860,242.39	7,277,721,914.84	(34,138,327.55)

Source: JPMorgan Chase CBN Cash Call Joint Venture Account, NEITI Audit Report 2012

The table above shows a decline of **\$34,138,327.55** in 2013 Dollar Cash Call Account Funding compared to 2012, indicating approximately 0.5% fall in 2013.

The total funding of cash call account totalling **\$7,277,349,866.46** represents the amount transferred for both cash call and non-cash call items.

A part of the 2013 total Cash Call i.e. **\$3,148,850,510.73** was monetised to Naira (**₦487,306,511,885.45** at prevailing CBN conversion rate) within the month of transfer and paid into the CBN/NNPC JV Cash Call Naira Account, while the dollar component was retained in JP MorganChase CBN JV Cash Call Account.

6.6.4 Cash Call Items

6.6.4.1 Cash Call Payments

The summary of Cash Calls paid by NNPC/NAPIMS to the Joint Venture Partners in Naira and Dollar for 2013 compared with figures from previous audit cycles (2009 – 2012) are presented in Tables 6.6.4.1A and 6.6.4.1B respectively:

Table 6.6.4.1A: Summary of Naira Cash Calls Paid by NNPC to JV Operators

FIVE YEAR SUMMARY OF TOTAL AMOUNT DISBURSED IN NAIRA FOR CASH CALL TO EACH JV OPERATOR BETWEEN 2009-2013					
	₦	₦	₦	₦	₦
	2009	2010	2011	2012	2013
NNPC/SPDC/TEPNL/NAOC	114,714,788,000	143,823,346,000	144,053,085,000	157,199,559,000	178,964,797,610
NNPC/MOBIL	83,312,705,000	81,103,423,000	69,155,453,000	101,587,679,000	86,797,809,900
NNPC/CNL	58,873,884,000	74,241,804,000	75,871,795,000	115,771,655,000	84,058,864,870
NNPC/TEPNL	38,913,916,000	60,414,517,000	57,645,890,000	68,521,229,000	66,339,694,180
NNPC/NAOC/POCNL	62,154,627,000	64,115,935,000	52,128,343,000	67,630,174,000	64,693,158,290
NNPC/POOCN	12,119,294,000	16,922,053,000	16,334,595,000	12,604,099,000	10,308,882,800
NPDC/CNL	529,874,000	489,278,000	676,337,000	367,033,000	317,636,440
NPDC/SPDC	464,203,000	331,427,000	716,426,000	1,283,473,000	1,336,756,440
CURRENT YEAR	371,083,291,000	441,441,783,000	416,581,924,000	524,964,901,000	492,817,600,530
PRIOR YEAR CASH CALL PAID BY NNPC TO JV OPERATORS				81,006,230,000	-
POST YEAR CASH CALL PAID	55,671,722,000	-	-	-	-
POST YEAR CASH CALL PAID (NIPP DOMGAS)	29,114,740,000	-	-	-	-
CREDIT TRANSFER FOR OB3 GAS PIPELINE	4,378,847,000	-	-	6,967,206,000	-
TOTAL	460,248,600,000	441,441,783,000	416,581,924,000	612,938,337,000	492,817,600,530

There was a decrease of **₦120.120 billion** in Naira cash calls paid in 2013 when compared with the total Naira Cash Calls paid in 2012, indicating approximately 20% fall in 2013. The decrease in cash call funding cannot be strictly linked to the assignment of some OMLS mentioned in **Section 6.6.1** above as would be expected, since cash calls were still paid with respect to all the OMLs assigned from NAOC JV.

The challenge of timeliness and appropriate value cash call payments by the Federation also creates difficulties in matching cash call payments to production volumes within any particular period.

Figure 6.6.4.1A: Summary of Naira Cash Calls paid by NNPC to JV Operators

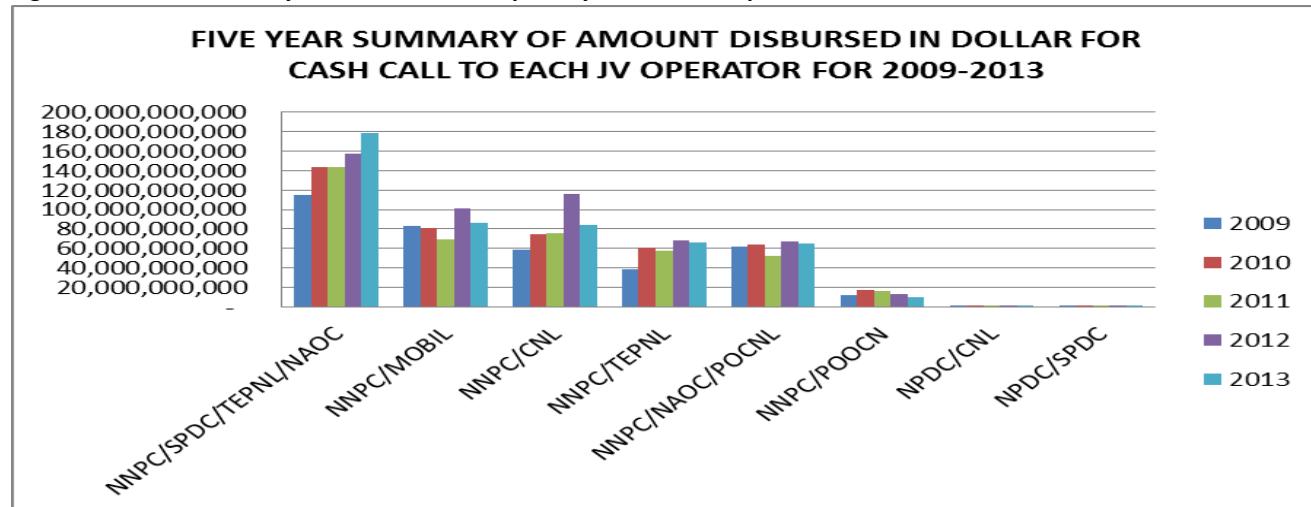


Table 6.6.4.1B: Summary of Dollar Cash Calls paid by NNPC to JV Operators

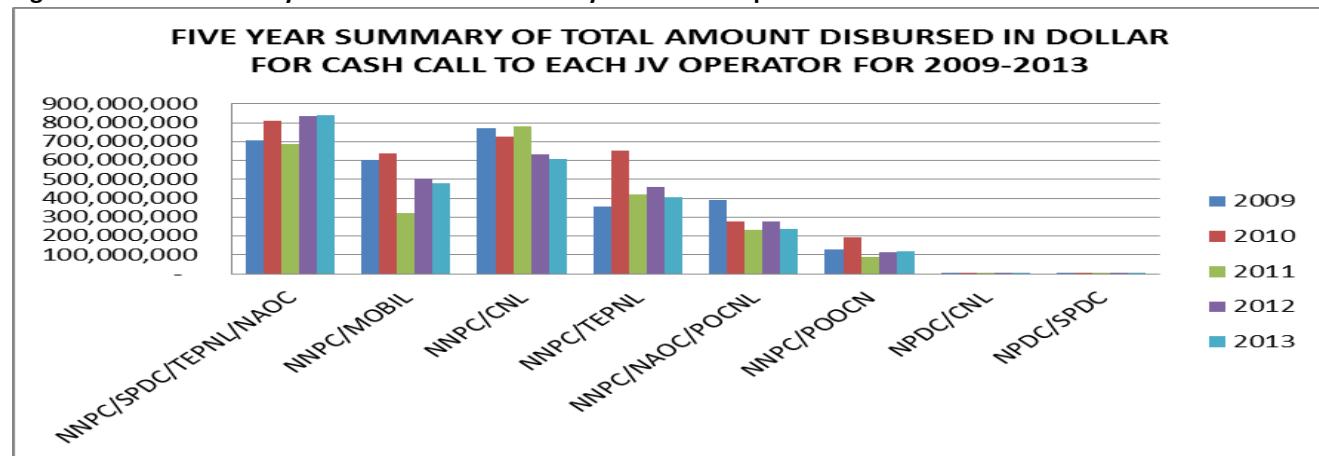
FIVE YEAR SUMMARY OF TOTAL AMOUNT DISBURSED IN DOLLAR FOR CASH CALL TO EACH JV OPERATOR FOR 2009-2013					
	\$	\$	\$	\$	\$
	2009	2010	2011	2012	2013
NNPC/SPDC/TEPNL/NAOC	705,064,000	811,685,000	685,288,000	836,240,000	839,879,980
NNPC/MOBIL	601,255,000	638,694,000	321,131,000	503,799,000	478,915,080
NNPC/CNL	770,408,000	728,075,000	780,692,000	634,015,000	608,496,480
NNPC/TEPNL	356,623,000	651,238,000	421,320,000	458,656,000	406,463,480
NNPC/NAOC/POCN	392,595,000	274,751,000	234,401,000	276,673,000	237,155,710
NNPC/POOCN	130,577,000	190,889,000	90,487,000	115,731,000	120,655,240
NPDC/CNL	3,235,000	883,000	2,024,000	1,005,000	694,690
NPDC/SPDC	298,000	180,000	1,895,000	1,388,000	4,941,520
CURRENT YEAR	2,960,055,000	3,296,395,000	2,537,238,000	2,827,507,000	2,697,202,180
PRIOR YEAR CASH CALL PAID BY NNPC TO JV OPERATORS	579,012,000	485,398,000	65,256,000	281,684,000	290,759,689
POST YEAR CASH CALL PAID	191,820,000				
TOTAL	3,730,887,000	3,781,793,000	2,602,494,000	3,109,191,000	2,987,961,869

Source: (a) NEITI's Audit Report 2012 (b) JP Morgan Chase CBN/NNPC Cash Call JV Account (Dollar Account)

There was a decrease of **\$121.229 million** in Dollar cash call payments in 2013 when compared to the figure for 2012 as presented above, indicating a decrease of approximately 4%. The issues involved in the decrease discussed under the Naira payments above are also applicable to the Dollar components of cash call payments.

SPDC however observed that the figures reported in Tables 6.6.4.1A and 6.6.4.1B for cash calls paid to SPDC JV for 2010 which was reported in previous NEITI Audit cycles is to be adjusted due to NNPC's retroactive recovery of a cash call over payment in 2008 and that the correct NNPC cash call numbers for 2010 are: **N116,037,868,000** and **\$779,679,967**. These figures could not be confirmed as at the time of reporting.

Figure 6.6.4.1B: Summary of Dollar Cash Calls Paid by NNPC to JV Operators



6.6.5 Key findings on non-JV Cash Call Payments

The total sum of **\$927.247 Million**, consisting of **\$709.191 Million** and **N18.617 Billion (\$118.056 Million)** was expended on non-cash-call items from the Cash call account in 2013. This amount expended on the non-cash call items by NAPIMS is higher than the actual sum of **\$716.194 Million** appropriated by the National Assembly for 2013. The breakdown of these expenditures are shown in Tables 6.6.5A and 6.6.5B for Naira and Dollar payments respectively.

Table 6.6.5A: Non JV Naira Cash Call Payments

SUMMARY OF NON JV CASH CALL PAYMENTS	
	₦
Special Frontier Exploration Services	-
Security Payments-payments to Nigerian Army Ope	6,600,000,000.00
Gas Infrastructure Development Projects	12,017,454,894.90
Grand Total	18,617,454,894.90

Source: NNPC/CBN Naira Cash Call 2013 Bank Statement, NAPIMS Records

Table 6.6.5B: Non JV Dollar Cash Call Payments

SUMMARY OF NON JV CASH CALL PAYMENTS		\$
Special Frontier Exploration Services		100,000,000.00
NAPIMS Overhead- January - December 2013		275,800,000.00
Security Payments-payments to Nigerian Navy		55,000,000.00
Gas Infrastructure Development Projects		278,391,898.71
Grand Total		709,191,898.71

Source: NNPC/CBN JPMorgan Chase Cash Call 2013 Bank Statement, NAPIMS Records

Implication

- a. The sum of **\$211.053 Million** incurred by NAPIMS, was without appropriation.
- b. Payments for non-cash call items in the sum of **\$927.247 Million** were made from cash call account.

Recommendations

- a. NAPIMS to account for non-cash call expenditures incurred especially given the fact that the sum of **\$35.127 Million** was refunded by NPDC into JPMorgan Chase Cash Call Dollar Account in July 2013 with respect to Cash Calls paid for the period April to November 2011 on OML 42 as indicated in Section 1.3.2 above.
- b. NAPIMS to operate separate accounts into which other expenditures appropriated in NAPIMS budget is to be paid. This is to ensure that cash call operations are separated from other appropriated costs.

NAPIMS Response

All payments for both JV and non-JV cash calls are based on operational exigencies. Therefore, the non-JV cash call payments made in 2013 was for Gas Infrastructure Development projects, Security payments to Nigerian Army and Navy, NAPIMS overhead and special frontier exploration services.

6.6.6 Unreconciled JV Cash Call Payments

During the validation exercise, our team observed that the cash call payments in NNPC/Pan Ocean JV payment schedule/template differed from the amount acknowledged in the JV Operator's (Pan Ocean) bank statement.

The review of PANOCEAN cash call templates on contributions revealed that cash call payments documented in cash call schedule/template in some instances differed from actual payments reflected in JV Operator's bank statement. For example, Pan Ocean cash call payment summary showed that the following payments were made, but audit review of the company's bank statements could not confirm the payments in 2013

- i. E & P- July payment of **\$2,066,300**
- ii. Domgas payment of **\$3,000,000**

- iii. E& P- January payment of **N900, 000,000**
- iv. E& P- April payment of **N220, 000,000**
- v. E& P- June payment of **N1, 448,079,000**
- vi. Domgas - August of **N200, 000,000**

In December 2013, the company's summary sheet showed **\$16,500,000** while the bank statement only reflected **\$2,499,950** as actual payment. The company explained that the payments were made from its sole account and not the JV Operator's bank Account. This is contrary to the JOA. In addition, Pan Ocean could only provide evidence for the validation of **N500,000,000** with respect to E& P- January payment of **N900, 000,000**.

Implication

The counterpart funding by JV partners may not be properly accounted for.

Recommendation

NNPC to periodically exercise its right of Audit on the operators account as contained in the Joint Operating Agreement to ensure proper reconciliation of cash call accounts and ensure that Pan Ocean make payments of outstanding cash call.

6.6.7 Key findings relating to cash calls paid by NAPIMS on OMLs assigned to NPDC

- a. The sum of **\$536.922 Million** was the total amount of cash calls paid in 2013 (Naira and Dollar) by NAPIMS with respect to OMLs in NAOC JV that had already been assigned to NPDC in December, 2012 despite the fact that the Crude Oil lifted by NNPC from the OMLs concerned were paid into the account of NPDC.

NAOC firmly highlighted that, as the operator of NAOC JV, under the JOA for OMLs 60, 61, 62 and 63, the company has not signed or endorsed any novation agreement from NNPC/NAPIMS to NPDC and has never interfaced with NPDC as partner in OMLs 60,61, 62 63 and continuously involves and shares all communication or obligation under the JOA only with NNPC/NAPIMS.

NAPIMS however provided evidence of a refund of the sum of **\$389.057 Million** by NPDC in 2014 leaving an outstanding balance of **\$147.864 Million**. There was however no evidence of any transfer of the refund to the Federation account.

- b. Audit evidence also revealed that cash calls were paid on asset(s) divested by NNPC to NPDC from SPDC JV between September 2010 and April 2011. The OMLs concerned and the date of Deed of Assignment approval by the Minister are listed below:

OMLs	Date of Assignment
4/38/41 h	16th September, 2010
26/30/34/40/42	21st April, 2011

The sum of **\$35.127 Million** was refunded by NPDC into JPMorgan Chase Cash Call Dollar Account in July 2013 with respect to Cash Calls paid for the period April to November 2011 on OML 42.

Review of NAPIMS documents also indicated that there is an outstanding refund request by NAPIMS on **OML 26 (\$414,000 and ₦249,272,000)** and **OML 42 (₦2,171,235,000)** for the same period.

- c. NAPIMS did not provide details or basis of refund computation. NAPIMS's explanation was that Cash Calls are not paid on OML-by-OML basis but are rather paid at company level. NAPIMS further responded that NPDC is to make similar cash call refunds on OMLs 30, 34 and 40, but the breakdown and amounts to be refunded for each of these divested assets is to be advised by SPDC.
- d. The various amounts of cash call refunded by NPDC to NAPIMS are due to the Federation account from which budgets were made. NAPIMS could not produce an appropriate authority to expend the refunds.

Table 6.6.7C: Cash Call paid to NAOC on behalf of NPDC and Cash Call Refund by NPDC

2013 CRUDE CASH CALL REFUND				NPDC REFUND OF CRUDE CASH CALL TO NAPIMS		
MONTH	\$'000	₦'000	F\$'000	\$'000	₦'000	F\$'000
JANUARY	18,330	4,556,970	46,990	(18,330)	(4,556,970)	(46,990)
FEBRUARY	10,716	3,650,143	33,673	(10,716)	(3,650,143)	(33,673)
MARCH	3,871	4,287,948	30,839	(3,871)	(4,287,948)	(30,839)
APRIL	11,799	6,215,722	50,891	(11,799)	(6,215,722)	(50,891)
MAY	24,414	6,479,733	65,167	(24,414)	(6,479,733)	(65,167)
JUNE	26,493	5,659,151	62,085	(26,493)	(5,659,151)	(62,085)
JULY	15,836	6,514,642	56,809	(15,836)	(6,514,642)	(56,809)
AUGUST	4,863	6,000,709	42,603	(4,863)	(6,000,709)	(42,603)
SEPTEMBER				-	-	-

	8,322	5,487,854	42,837			
OCTOBER	12,807	1,655,062	23,216	-	-	-
NOVEMBER	15,188	1,726,657	26,047	-	-	-
DECEMBER	20,298	5,639,090	55,764	-	-	-
TOTAL	172,937	57,873,681	536,921	(116,322)	(43,365,018)	(389,057)

Source: NAPIMS Records

It should be noted that the sum of **\$389,057,000** in Functional Currency shown in the table above was refunded by NPDC to NAPIMS in April 2014. The breakdown of the refund due and made is below:

Implication

- a. Cash calls budgeted by the Federation were used to fund crude oil and gas production activities from OMLs already assigned to NPDC by NNPC.
- b. The Federation has not only lost the crude oil and gas proceeds from the assigned OMLs but has additionally incurred costs in the form of cash calls paid.

Recommendations

- a. All past transactions involving divestment/assignment of JV assets should be investigated. The position of the audit is that, the process of divestment of assets within the JV arrangements is not economically justifiable and lacks transparency.
- b. The sum of **\$389,057,000** refunded by NPDC should have been paid back to the Federation Account. NAPIMS should therefore account for the utilization of the refund.
- c. NAPIMS being the custodian of NNPC's investment should have records of cash calls paid/refunded on each OML and these records are to be produced for audit review of cash calls paid to JV operators with respect to OMLs assigned to NPDC by NNPC for the verification of expenditure incurred with the refunds.
 SPDC has confirmed its willingness to give necessary support if and when required, in the provision of information relating to breakdown and amounts to be refunded with respect to OMLs 30, 34 and 40. The Federal Government is advised to follow up on this.
- d. The use of gas revenue to offset cash call refundable from assets assigned to NPDC as revealed from audit findings is not transparent and accountable.

6.7 Gas Flare Penalty

Gas Flare Penalty is the penalty imposed on Oil and Gas producing Companies operating within the country. The objective is to serve as a deterrent for burning the natural gas that is associated with crude oil when it is pumped from the ground. This correctional measure is to reduce air pollution, environmental degradation caused by Gas flaring and also encourage investment in Gas infrastructure by the Oil and Gas Companies.

The regulations governing gas flare penalty include:

- Regulation 42 of the Petroleum (Drilling and Production) Regulations, 1969.
- Associated Gas Re-injection Act, 1979.
- Associated Gas Re-injection (Continued Flaring of Gas) Regulations, 1984.
- Cap. 26 Laws of the Federation of Nigeria, 1990.

Gas flare penalty rates used under various fiscal regimes are:

- 2K applicable from 1985 to June 1992
- 50K applicable from July 1992 to December 1997
- N10 applicable from January 1998 to March 2008
- \$3.5 applicable from April 2008 to Date (still in contention)

The rate of N10 as provided by the Regulation of January 1998 is still being applied as against the \$3.5, which is the latest rate. The companies complete a Self-Assessment based on the parameters in the Act and make monthly payments to the designated JP Morgan Accounts which are subsequently reconciled with the DPR.

Table 6.7 - Gas Flare Penalty

S/N	ENTITY	Gas Flared Penalty
		USD \$'000
1	AMNI	3,807
2	APDNL	2,749
3	APENL	216
4	ATLAS	52
5	Chevron	2,073
6	CONOIL	1,831
7	CONTINENTAL	2,333
8	Dubri	79
9	Energia	159
10	Midwestern	34
11	MOBIL	1,024
12	MONI PULO	61

S/N	ENTITY	Gas Flared Penalty
		USD \$'000
13	NAOC	428
14	Newcross	325
15	Oriental Energy	308
16	PHILLIPS OIL	254
17	PLATFORM	315
18	SEEPCO	6
19	SEPLAT	504
20	SNEPCo	194
21	SPDC	794
22	TEPNG	639
23	TUPNI	290
	TOTAL	18,475

Total payments of Gas flare penalty in 2013 amounted to **\$18,475,000** representing a **25%** decline in payment as compared with **\$24,580,000** reported in 2012. This is as a result of reduction in gas flared during the year under review.

6.7.1 Key findings on Gas Flare Penalty

The following are issues revealed by the audit in the assessment and collection of Gas Flare Penalties which were also reported in the previous audit cycle:

- a. Inadequate measurement infrastructure to determine the quantity of Gas Flared by the Oil and Gas Companies.
- b. Non-compliance with the 2008 Gas flaring penalty rates.
- c. Poor collection of Gas flared penalties and lack of political will to implement the April 2008 Regulation on the new rate.
- d. Lack of enabling legal and regulatory environment that will encourage the development of Gas Infrastructure by the Oil and Gas Companies.

Implication

- a. Incorrect determination of Gas Flared volumes and consequent under assessment of Gas flared penalties.
- b. Sub-optimal collections of Gas Flared penalties and consequent lower revenue to the Federation.
- c. Low-level investment in Gas infrastructure by the Oil and Gas Companies.

Recommendations

- a. DPR should enforce payment of new gas flare penalty rate.
- b. DPR should exercise greater control over the assessment and collections of gas flare penalty.
- c. Develop and implement a National Master plan on Gas.

6.8 Education Tax (EDT)

The administration of this Tax is governed by the Education Tax Act No. 7 of 1993 and amended by Act No. 40 of (22nd Dec.) 1998. The Act imposes tax at the rate of 2% on the assessable profits of all incorporated bodies. The tax applies to all companies registered in Nigeria. The assessable profits of the companies within the audit scope are ascertained in the manner specified in the Petroleum Profits Tax Act.

Table 6.8 – Education Tax (EDT)

S/N	ENTITY	EDT
		USD\$'000
1	AENR	6,047
2	AMNI	3,290
3	APDNL	22,529
4	APENL	18,955
5	Chevron	58,461
6	Chevron MCA	3,089
7	CONOIL	4,128
8	CONTINENTAL	2,509
9	Dubri	37
10	ESSO	96,704
11	FHN	132
12	Midwestern	0.03
13	MOBIL	490,198
14	NAE	12,888
15	NAOC	22,940
16	NAOC MCA	624
17	Newcross	112

S/N	ENTITY	EDT
		USD\$'000
18	NLNG	118,529
19	PHILLIPS	3,157
20	Pillar	5
21	PLATFORM	185
22	SEPLAT	4,833
23	SNEPCo	123,870
24	SPDC	145,385
25	SPDC MCA	6,547
26	STAR DEEP	81,624
27	STAT OIL	62,735
28	TEPNG	56,222
29	TEPNG MCA	584
30	TUPNI	131,021
31	Waltersmith	425
	TOTAL	1,477,764

There was a significant rise of **62%** in Education Tax (EDT) payments made by SPDC as compared with **\$93,644,000** made in 2012 and a sharp growth of **420%** in EDT payments by Mobil as compared with **\$94,311,000** in 2012. There is a decline of **14%** EDT payments by TEPENG as against **\$65,797,000** reported in 2012. There is an overall increase of **32%** as compared with **\$1,120,421,000** in EDT payment recorded in 2012.

6.9 NDDC 3% Contribution Levy

The Niger Delta Development Commission was established in 2000 by the NDDC Establishment Act. The Act sets out the mandate of the Commission which is collection of 3% of annual budget of upstream companies and the tackling of ecological problems which arise from exploration of oil minerals in the Niger-Delta area.

Table 6.9 - NDDC 3% Contribution Levy

S/N	ENTITY	NDDC
		USD\$'000
1	AENR	1,673
2	AMNI	2,000
3	APDNL	35,956
4	APENL	25,442
5	Chevron	61,879
6	Dubri	44
7	Energia	963
8	ESSO	8,094
9	Express	6
10	Midwestern	256
11	MOBIL	65,002
12	NAE	6,526
13	NAOC	9,787
14	Oriental Energy	1,325
15	Pillar	71
16	PLATFORM	2,250
17	SEPCO	272
18	SEPLAT	18,316
19	SNEPCo	32,373
20	SPDC	136,181
21	STAR DEEP	27,999
22	STATOIL	6,160
23	TEPNG	41,886
24	TUPNI	78,360
25	Waltersmith	99
	TOTAL	562,921

There was a **0.74%** increase in total NDDC payments in 2013 as compared with **\$558,808,000** payment in 2012.

6.10 Nigeria Content Development and Monitoring Board (NCDMB)

The Nigerian Content Development and Monitoring Board (NCDMB) was established to implement the provisions of the Act, which makes it mandatory for the collection of 1% Statutory deductions from any contract awarded to any operator, contractors, sub-contractors, alliance partners or any other entity in any project operation activity in any transactions in the upstream sector of the Industry. There is also provision in the Act for a Nigerian Content Development Fund, which is

established for the purpose of funding the implementation of Nigerian content development in the Nigeria oil and gas industry.

The table below shows NCDMB contribution by the respective Oil and Gas Companies during the year under review.

Table 6.10 - Nigeria Content Development and Monitoring Board (NCDMB)

S/N	ENTITY	NCDMB
		USD\$'000
1	AENR	442
2	AMNI	1,832
3	APDNL	8,578
4	APENL	2,803
5	CNL	15,785
6	CONOIL	2,622
7	Energia	4,111
8	Midwestern	670
9	MOBIL	26,599
10	NAE	4,523
11	NAOC	4,912
12	Newcross	329
13	Oriental Energy	4,956
14	Pillar	63
15	PLATFORM	87
16	SEEPCO	82
17	SEPLAT	6,158
18	SNEPCo	5,235
19	SPDC	19,560
20	STAR DEEP	6,567
21	STATOIL	12
	TOTAL	115,925

In 2013, total NCDMB payments amounted to **\$115,925,000** representing a **45%** increase over **\$80,010,000** recorded in 2012. SNEPCO had a **78%** decline in NCDMB levies paid in 2013.

6.11 Value Added Tax (VAT)

Value Added Tax (VAT) was introduced in Nigeria in 1993 and the current rate is 5%. The payments reported and validated to the accounts of FIRS is shown in the table below:

Table 6.11 (a) Value Added Tax (VAT) Payments in 2013

VAT	2013 \$'000	Percentage Proportion %
JV	560,447	58.05%
PSC	210,181	21.77%
SC	650	0.07%
MF&SR	60,725	6.29%
NLNG	133,518	13.83%
TOTAL	965,521	100%

Table 6.11 (b) Value Added Tax (VAT)

S/N	ENTITY	Value Added Tax
		\$'000
1	AENR	650
2	AMNI	5,826
3	APDNL	29,331
4	APENL	11,536
5	BRITTANIA- U	166
6	CHEVRON	73,467
7	CONOIL	5,521
8	CONTINENTAL	3,059
9	DUBRI	81
10	ENERGIA	4,169
11	ESSO	18,993
12	FHN	115
13	FRONTIER OIL LIMITED	2,242
14	MOBIL	127,718
15	MONIPULO	226
16	NAE	29,575
17	ND WESTERN	56
18	NDPR	1,097
19	NECONDE	2,487
20	NEWCROSS	886
21	NLNG	133,518
22	OANDO	1
23	ORIENTAL	12,672
24	PANOCEAN	29,428
25	PHILIPS	1,009
26	PILLAR	982
27	PLATFORM	53
28	SEEPCO	578

S/N	ENTITY	Value Added Tax
		\$'000
29	SEPLAT	20,730
30	SHORELINE NATURAL RESOURCES	137
31	SNEPCO	36,162
32	SPDC	140,303
33	STARDEEP	30,503
34	STATOIL	109
35	TEPNNG	188,522
36	TUPNI	53,393
37	WALTERSMITH	220
	TOTAL	965,521

The Value Added Tax payments in Joint Venture (JV) rose by **29%** from 2012 payment of **\$435,226,000**, while total VAT payments had an increase of **25%** when compared to 2012 payment of **\$770,834,000**.

6.12 Withholding Tax (WHT)

A withholding tax is basically an advance and indirect source of taxation deducted at source from the invoices of the tax payer.

Withholding tax rates are usually **10%** or **5%** depending on the type of transaction and collecting authority for the tax (which can be a Federal Inland Revenue or the State Inland Revenue).

6.12.1 WHT Payments to FIRS

Table 6.12.1 WHT Payments to FIRS

S/N	ENTITY	Withholding Tax FIRS
		\$'000
1	ALLIED ENERGY	30
2	AMNI	3,707
3	APDNL	30,478
4	APENL	12,486
5	BRITTANIA- U	701
6	CHEVRON	88,359
7	CONOIL	5,858
8	CONTINENTAL	991
9	DUBRI	233
10	ENERGIA	3,705
11	ESSO	18,629
12	FHN	162

S/N	ENTITY	Withholding Tax FIRS	
		\$'000	
13	FRONTIER OIL LIMITED	1,522	
14	MIDWESTERN	576	
15	MOBIL	135,027	
16	MONIPULO	356	
17	NAE	148	
18	ND WESTERN	45	
19	NDPR	1,351	
20	NECONDE	2,699	
21	NEWCROSS	805	
22	NLNG	275,459	
23	OANDO	2	
24	ORIENTAL ENERGY	567	
25	PHILIPS OIL	112	
26	PILLAR	396	
27	PLATFORM	711	
28	SEEPCO	422	
29	SHORELINE NATURAL RESOURCES	8	
30	SNEPCO	37,110	
31	SPDC	138,469	
32	STARDEEP	36,212	
33	TEPNG	141,541	
34	TUPNI	52,574	
35	WALTERSMITH	243	
	TOTAL	991,693	

Total withholding tax payment by all companies to the Federation in 2013 amounted to **\$991,693,000**.

6.12.2 WHT Payments to States

Table 6.12.2 Withholding (WHT) Payments to States in 2013

S/N	STATES	2013 USD \$'000	Percentage Portion %
1	LAGOS	8,745	49%
2	RIVERS	4,041	23%
3	AKWA IBOM	450	3%
4	OGUN	15	0.09%
5	ABIA	92	1%
6	DELTA	3,590	20%
7	CROSS RIVER	30	0.2%

S/N	STATES	2013 USD \$'000	Percentage Portion %
8	EDO	34	0.19%
9	OYO	7	0.04%
10	IMO	150	1%
11	KOGI	2	0.01%
12	OSUN	1	0.00%
14	ANAMBRA	1	0.01%
16	BAYELSA	536	3%
18	EKITI	0.14	0.001%
20	ENUGU	10	0.056%
22	KADUNA	35.00	0.197%
24	KWARA	2.00	0.011%
	TOTAL	17,740	100%

Note: Rivers State includes payment from NLNG.

Withholding Tax payment to all States of the Federation amounted to **\$17,740,000** representing a **57%** rise as compared to **\$11,314,000** paid in 2012. Lagos State which had the highest percentage of Withholding tax Collections included payment of **\$1,195,000** by TEPNG and **\$4,219,000** by AMNI.

6.12.2.1 WHT Payments to Lagos State

Table 6.12.2.1 WHT Payments to Lagos State

S/N	ENTITY	WHT LAGOS
		USD\$'000
1	AMNI	4,219
2	APDNL	819
3	APENL	10
4	Brittania-U	0.3
5	Chevron	408
6	Dubri	13
7	Energia	51
9	ESSO	54
10	FHN	16
11	FHN	4
12	FRONTIER OIL LIMITED	48
13	Midwestern	37
15	MOBIL	589
16	ND WESTERN	13
17	NDPR	43
18	NECONDE	301

S/N	ENTITY	WHT LAGOS
		USD\$'000
19	Newcross	9
20	Oriental	14
21	PHILLIPS OIL	22
22	PHILLIPS OIL	1
23	Pillar	613
24	SNEPCo	71
25	SPDC	152
26	STARDEEP	29
27	TEPNG	1,195
28	TUPNI	14
	Total	8,745

Withholding Tax Payments to Lagos State amounted to **\$8,745,000** with TEPNG and AMNI contributing **14%** and **48%** of the total payments respectively.

6.12.2.2 WHT Payments to Rivers States

Table 6.12.2.2 WHT Payments to Rivers States

S/N	ENTITY	WHT RIVERS
		USD\$'000
1.	AMNI	6
2.	APDNL	16
3.	APENL	1
4.	Chevron	140
5.	ESSO	0.35
6.	MOBIL	106
7.	NDPR	25
8.	NLNG	689
9.	SNEPCo	4
10.	SPDC	650
11.	STARDEEP	3
12.	TEPNG	2,394
13.	TUPNI	6
	TOTAL	4,041

Withholding tax payments to Rivers State amounted to **\$4,041,000** in 2013 with NLNG contributing **17%** of payment.

6.12.2.3 WHT Payments to Akwa-Ibom State

Table 6.12.2.3 WHT Payments to Akwa-Ibom State

S/N	ENTITY	USD\$'000
1	Chevron	0.38
2	ESSO	6
3	FRONTIER OIL LIMITED	24
4	MOBIL	371
5	SPDC	7
6	TEPNG	42
	TOTAL	450

Total payments of withholding tax to Akwa- Ibom State amounted to **\$450,000** in 2013.

6.12.2.4 WHT Payments to Ogun State

Table 6.12.2.4 WHT Payments to Ogun State

S/N	ENTITY	USD\$'000
1	Chevron	0.10
2	ESSO	0.04
3	MOBIL	8
4	SPDC	7
	TOTAL	15

Total payments of withholding tax amounted to **\$15,000** in 2013.

6.12.2.5 WHT Payments to Abia State

Table 6.12.2.5 WHT Payments to Abia State

S/N	ENTITY	WHT ABIA
		USD\$'000
1	MOBIL	5
2	SPDC	87
	TOTAL	92

Total withholding tax payments to Abia State amounted to **\$92,000** in 2013.

6.12.2.6 WHT Payments to Delta State

Table 6.12.2.6 WHT Payments to Delta State

S/N	ENTITY	USD\$'000
1	Chevron	248
2	Energia	65
3	MOBIL	6
4	NDPR	2
5	Neconde	1
6	SNEPCo	14
7	SPDC	3,225
8	STARDEEP	5
9	TEPNG	24
	TOTAL	3,590

Total withholding tax payment to Delta State amounted to **\$3,590,000** in 2013.

6.12.2.7 WHT Payments to Cross River State

Table 6.12.2.7 WHT Payments to Cross River State

S/N	ENTITY	WHT CROSS RIVER
		USD\$'000
1	APDNL	14
2	APENL	3
3	MOBIL	10.35
4	SPDC	2
	TOTAL	29.97

Cross Rivers State withholding tax payments amounted to **\$29,970** in 2013.

6.12.2.8 WHT Payments to Edo State

Table 6.12.2.8 WHT Payments to Edo State

S/N	ENTITY	USD\$'000
1	APDNL	1
2	Chevron	2
3	Dubri	1.77
4	Midwestern	5
5	MOBIL	6
6	SPDC	16

S/N	ENTITY	USD\$'000
7	TEPNG	2.57
	TOTAL	34

Total withholding tax payment in Edo State amounted to **\$34,000** in 2013.

6.12.2.9 WHT Payments to Oyo State

Table 6.12.2.9 WHT Payments to Oyo State

S/N	ENTITY	USD\$'000
1	Chevron	1.11
2	MOBIL	4.41
3	TEPNG	1.13
	TOTAL	6.65

Total withholding tax payments in Oyo State amounted to **\$6,650** in 2013.

6.12.2.10 WHT Payments to Imo State

Table 6.12.2.10 WHT Payments to Imo State

S/N	ENTITY	USD\$'000
1	APDNL	50
2	Chevron	5
3	SPDC	95
	TOTAL	150

Total withholding tax payments to Imo State amounted to **\$150,000** in 2013.

6.12.2.11 WHT Payments to Kogi State

Table 6.12.2.11 WHT Payments to Kogi State

S/N	ENTITY	USD\$'000
	SPDC	2
	TOTAL	2

Total withholding tax payments to Kogi State amounted to **\$2,000** in 2013.

6.12.2.12 WHT Payments to Osun State

Table 6.12.2.12 WHT Payments to Osun State

S/N	ENTITY	USD\$'000
	SPDC	1
	TOTAL	1

Total withholding tax payments in Osun State amounted to **\$1,000** in 2013

6.12.2.13 WHT Payments to Kwara State

Table 6.12.2.13 WHT Payments to Kwara State

S/N	ENTITY	USD\$'000
	SPDC	2
	TOTAL	2

Total withholding tax payments to Kwara State amounted to **\$2,000** in 2013

6.12.2.14 WHT Payments to Anambra State

Table 6.12.2.14 WHT Payments to Anambra State

S/N	ENTITY	USD\$'000
	SPDC	1
	TOTAL	1

Total withholding tax payments to Anambra State amounted to **\$1,000** in 2013.

6.12.2.15 WHT Payments to Bayelsa State

Table 6.12.2.15 WHT Payments to Bayelsa State

S/N	ENTITY	USD\$'000
1	Chevron	2
2	SPDC	534
	TOTAL	536

Total withholding tax payments to Bayelsa State amounted to **\$536,000** in 2013.

6.12.2.16 WHT Payments to Ekiti State

Table 6.12.2.16 WHT Payments to Ekiti State

S/N	ENTITY	USD\$'000
1	SPDC	0.14
	TOTAL	0.14

Total withholding tax payments to Ekiti State amounted to **\$140** in 2013

6.12.2.17 WHT Payments to Enugu State

Table 6.12.2.17 WHT Payments to Enugu State

S/N	ENTITY	USD\$'000
1	SNEPCo	3
2	SPDC	7
	TOTAL	10

Total withholding tax payments to Enugu State amounted to **\$10,000** in 2013.

6.12.2.18 WHT Payments to Kaduna State

Table 6.12.2.18 WHT Payments to Kaduna State

S/N	ENTITY	USD\$'000
1	SPDC	35
	TOTAL	35

Total withholding tax payments to Kaduna State amounted to **\$35,000** in 2013.

6.13 Pay As You Earn (PAYE) Tax

6.13.1 PAYE Payment to FIRS

Table 6.13.1 PAYE Payment to FIRS

S/N	ENTITY	PAYE FIRS
		USD\$'000
1	APDNL	175
2	Chevron	10,939
3	ESSO	38
4	Express	1
5	MOBIL	1,038
6	NAE	3,313
7	NLNG	2,799
8	PHILIPS	656
9	Pillar	726
10	SEEPCO	129
11	SNEPCo	60
12	SPDC	1,151
13	STATOIL	139,841
14	TEPNG	7,658
	TOTAL	168,524

The total sum of PAYE payments in 2013 amounted to **\$168,524,000**.

6.13.2 PAYE Payment to States

Table 6.13.2 PAYE Payment to States

STATE	2013 USD \$'000	Percentage Proportion %
LAGOS	211,881	38%
RIVERS	183,891	33%
AKWA IBOM	39,887	7.17%
DELTA	116,836	21.01%
IMO	1,009	0.18%
BAYELSA	169	0.030%
CROSS RIVER	1,120	0.201%
OGUN	1,164	0.209%
EDO	14	0.003%
BORNO	61	0.01%
TOTAL	556,030	100%

There was an increase of **164%** in PAYE to Rivers State as compared to **\$69,681,000** in 2012 and a **15%** increase to Akwa Ibom State as against **\$34,581,000** reported in 2012. There is an overall increase of **184%** of PAYE payments to States as compared with 2012. This may be due to expansion in staff strength of these companies and increase in payroll.

6.13.2.1 Payment to Lagos State

Table 6.13.2.1 Payment to Lagos State

S/N	ENTITY	PAYE LAGOS
		USD '\$000
1	ALLIED	159
2	AMNI	5,658
3	APDNL	8,368
4	ATLAS	13
5	Brittania U	73
6	Chevron	80,551
7	Dubri	68
8	Energia	461
9	ESSO	6,855
11	FRONTIER OIL LIMITED	258
12	MOBIL	41,135
13	ND WESTERN	102
14	NDPR	54
15	Neconde	962
16	Newcross	206
17	NLNG	78
18	PHILLIPS	663
19	Pillar	432
20	SHEBA	30
21	Shoreline Natural Resources	423
22	SNEPCo	24,430
23	SPDC	18,515
24	TEPNG	22,387
	TOTAL	211,881

Total PAYE payments to Lagos State amounted to **\$211,881,000** in 2013.

6.13.2.2 Payment to Rivers State

Table 6.13.2.2 Payment to Rivers State

S/N	ENTITY	USD\$'000
1	AMNI	349
2	Chevron	7,713
3	ESSO	22
4	MOBIL	3,571
5	NDPR	125
6	PHILLIPS	15
7	TEPNG	43,366
8	NLNG	43,742
9	SPDC	79,484
10	SNEPCo	1,786
11	APDNL	467
12	NAE	3,251
	TOTAL	183,891

Total PAYE payments to Rivers State amounted to **\$183,891,000** in 2013 with TEPENG and NLNG contributing about **47%** of the total payments.

6.13.2.3 Payment to Akwa Ibom

Table 6.13.2.3 Payment to Akwa Ibom

S/N	ENTITY	USD\$'000
1	ESSO	71
2	FRONTIER OIL LIMITED	458
3	MOBIL	39,357
	TOTAL	39,887

Total PAYE payments to Akwa Ibom State amounted to **\$39,887,000** with MOBIL contributing about **99%** of the total payments.

6.13.2.4 Payment to Delta State

Table 6.13.2.4 Payment to Delta State

S/N	ENTITY	USD\$'000
1	Chevron	93,256
2	Energia	453
3	ND WESTERN	10
4	Neconde	254
5	Pillar	294
6	SEEPCO	129
7	SNEPCo	576
8	SPDC	21,863
	TOTAL	116,836

Total PAYE payments to Delta State amounted to **\$116,836,000** with Chevron contributing **80%** of the total payments.

6.13.2.5 Payment to Imo State

Table 6.13.2.5 Payment to Imo State

S/N	ENTITY	USD\$'000
1	APDNL	670
2	Chevron	338
	TOTAL	1,009

Total PAYE payments to Imo State amounted to **\$1,009,000**.

6.13.2.6 Payment to Bayelsa State

Table 6.13.2.6 Payment to Bayelsa State

S/N	ENTITY	USD\$'000
1	Chevron	106
2	NAE	62
	TOTAL	168

Total PAYE payments to Bayelsa State amounted to **\$168,000**.

6.13.2.7 Payment to Cross River State

Table 6.13.2.7 Payment to Cross River State

S/N	ENTITY	USD\$'000
	APDNL	560
	APDNL	560
	TOTAL	1,120

Total PAYE payments to Cross River State amounted to **\$1,120,000**.

6.13.2.8 Payment to Ogun State

Table 6.13.2.8 Payment to Ogun State

S/N	ENTITY	USD\$'000
1	APDNL	0.08
2	Chevron	565
3	SNEPCo	288
4	SPDC	311
	TOTAL	1,164

Total PAYE payments to Ogun State amounted to **\$1,164,000**.

6.13.2.9 Payment to Edo State

Table 6.13.2.9 Payment to Edo State

S/N	ENTITY	USD\$'000
	Dubri	14
	TOTAL	14

Total PAYE payments to Edo State amounted to **\$14,000**.

6.13.2.10 Payment to Borno State

Table 6.13.2.10 Payment to Borno States

S/N	ENTITY	PAYE BORNO
		USD \$'000
1	Oriental Energy	61
	TOTAL	61

Total PAYE payments to Borno State amounted to **\$61,000** in 2013

6.14 Local Government Taxes

Table 6.14 Local Government Taxes

S/N	ENTITY	LOCAL GOVT TAX
		USD\$'000
1	NLNG	1,089
	TOTAL	1,089

In 2013 NLNG reported local government taxes of **\$1,089,000**. These payments were made to various Local Governments (Bonny, Obio/Akpor, Emohua, Port Harcourt City and Ahoada West) in Rivers State.

6.15 NIMASA Levies

Nigerian Maritime Administration and Safety Agency (NIMASA) is an agency of government charged with the responsibility of:

- Promoting the development of indigenous commercial shipping in international and coastal shipping trade;
- Regulating and promoting maritime safety, security, marine pollution control and maritime labour.

The agency is governed by NIMASA Act 2007 which stipulates the powers, sources of finance and regulations of its activities. The Agency is under the supervision of Federal Ministry of Transportation.

The NIMASA Act 2007 states that the agency shall be funded by monies accruing from the following sources:

- i. 3% of gross freight on all international inbound and outbound cargo from ships or shipping companies operating in Nigeria to be collected and paid over to the Agency to meet its operational costs;
- ii. 0.5% of stevedoring charges collected by employers of dock labour;

- iii. All fees for ship registration, licenses, surveys, examination certification and permits issued by the Agency, fine and levies paid to the Agency;
- iv. All other financial assets that may from time to time be vested in or accrue to the Agency in the course of performing its functions under the Act or pursuant of the Act;
- v. All other sums collected or received by the Agency for services rendered or facilities provided by the Agency;
- vi. Gifts, grant, aids, etc. and
- vii. All such other sums as may be received by the Agency from other sources.

The revenue of interest to NEITI Oil and Gas Audit is the 3% gross freight mentioned above apart from the Cabotage levy which is also administered by NIMASA.

Revenue Paid by Oil & Gas Industry

- i. 2% Cabotage levies: Section 42 of the Cabotage Act 2003 establishes the Cabotage Vessel Financing Fund. Section 43(a) stipulates that “a surcharge of 2 per cent of the contract sum performed by any vessel engaged in the coastal trade”. The currency of the levy collection is denominated in Naira and Dollar.
 Section 44 of the Act empowers NIMASA to collect, deposit and administer the fund in commercial banks under guidelines proposed by the Minister of Transport and approved by the National Assembly.
- i. 3% of gross freight: Section 15(a) empowers NIMASA to collect “3% of gross freight on all international inbound and outbound cargo from ships or shipping companies operating in Nigeria to be collected and paid over to the Agency to meet its operational costs”. The currency of the levy collection is Dollar denominated.

The table below show payments to NIMASA as reported by the companies during the year under review.

Table 6.15 NIMASA Levies

S/N	ENTITY	NIMASA Levy
		\$'000
1	AMNI	250
2	APDNL & APENL	2,400
3	CNL	4,782
4	ESSO	170
5	MOBIL	3,800
6	NLNG	150,930
7	SNEPCO	1,511
8	STARDEEP	1,102
TOTAL		164,945

Total payments made to NIMASA as disclosed by entities covered in 2013 Audit amounted to **\$164,945,000** of which NLNG contributed **92%** of the total payments. However, these payments could not be traced to NIMASA's records.

NIMASA did not cooperate with the audit process in the population of templates and provision of necessary documents for audit review.

6.16 NIWA Levies

Decree No. 13 of 1997 established the National Inland Waterways Authority (NIWA) with a mandate to manage Nigeria's vast inland waterway resources. The Decree vests in NIWA the power of exclusive management, direction and control on the Nigerian inland waterways. This power is exercised on Nigeria's 3000km navigable waterways from the Nigeria/Niger and Nigeria/Cameroon borders to the Atlantic Ocean. Nigeria is blessed with a river configuration very suitable for North-South movement of people and goods.

The inland waterways of Nigeria comprise of the main river system (Rivers Niger and Benue which form a confluence at Lokoja), creeks, lagoons, lakes and intra-coastal waters. The levies collected include Right of way, dredging permit etc.

Table 6.16 NIWA Levies

S/N	ENTITY	NIWA
		\$'000
1	Dubri	6
2	MPNU	119
3	NLNG	96
	TOTAL	221

6.17 NESS Fees

The Nigeria Export Supervision Scheme (NESS) Fee is a statutory payment to the Federal Government on all legitimate goods which include payments for crude oil and its derivatives and payments for non-oil goods. NESS is a self-financing Scheme where the Inspection Agents are paid from the NESS fee collected from the exporters. Any balance in the NESS account domiciled with CBN is used for the administration of the Scheme. The enabling law, Act No. 10 of 1996, section 14 (3-4) stipulates that; all expenses relating to the remuneration, fees, and other charges payable to the inspection agent(s) shall be defrayed from the NESS fee account and any balance remaining in the account shall be used to administer the NESS program. The NESS fee rate is 0.12% of FOB value of crude oil export in the period under review.

Table 6.17 - NESS Fees

S/N	ENTITY	NESS Fees
		\$'000
1	AENR	310
2	ALLIED ENERGY	118
3	APDNL	1,677
4	APENL	610
5	BRITTANIA - U	46
6	CHEVRON	8,487
7	DUBRI	14
8	ENERGIA	193
9	ESSO	1,602
10	EXPRESS	6
11	FHN	8
12	MIDWESTERN	256
13	MOBIL	9,233
14	NAE	563
15	NAOC	812
16	ND WESTERN	241
17	NECONDE	171
18	NNPC	24,213
19	ORIENTAL ENERGY	1,504
20	PILLAR	71
21	PLATFORM	51
22	SEEPCO	272
23	SEPLAT	953
24	SHEBA	20
25	SHORELINE NATURAL RESOURCES	312
26	SNEPCO	2,140
27	STAR DEEP	2,312
28	STATOIL	895
29	TEPNNG	4,240
30	TUPNI	1,669
31	WALTERSMITH	99
	TOTAL	63,100

The sum of **\$63 Million** in the above table is the amount reported by the companies. However, the total payment of NESS fees as aggregated from the account (NESS fee crude oil export) with CBN amounted to **\$81.535 Million (NGN12,858,922,697)** compared to the sum of **\$43,843,040 (N6,914,473,623.06)** reported by CBN. The total NESS fee collections by CBN could not be tied to individual entities because CBN did not provide details of payments. It is also evident that Mobil, Chevron and NNPC contributed 24%, 22% and 40% of total payments respectively.

Findings

- a. The audit revealed improper record keeping with respect to NESS fee collections. There are no records of “who paid what” from the Oil and Gas Sector and neither did the NESS Secretariat produce Audited Annual Reports containing statements of income and expenditures made in accordance with the pre-shipment Inspection of Export Act 1996.
- b. It was observed that Ness fee collections were used to finance other activities not related to NESS operations.

Recommendations

The Federal Ministry of Finance to ensure better transparency and accountability in the operations of NESS through:

- i. Comprehensive and regular reporting of NESS operations to include NESS Collections, details of NESS Fee payers and the corresponding export values;
- ii. The Annual Financial report should also seek to reconcile export volumes recorded with those of other regulatory Agencies like DPR and the Department of Weights and Measures of the Federal Ministry of Trade and Investments;
- iii. The NESS Secretariat, which is domiciled in CBN, should in collaboration with Trade and Exchange Department of the Bank ensure that export proceeds are tracked using the NXP forms, which is an integral part of the NESS operations. This will ensure achieving the important objective of NESS, which is the repatriation of exports.

CHAPTER SEVEN

7 DOWNSTREAM OPERATIONS

7.1 Overview of the Downstream Operations.

The downstream sector involves operations such as refining of crude into its various components, importation of refined products, distribution and marketing.

The Nigeria National Petroleum Corporation (NNPC) is the largest player in the downstream industry through its subsidiary, the Pipelines and Products Marketing Company (PPMC) which has four refineries with a total petroleum refining capacity of 445,000 barrels per day. Federal Government allocates this quantity of crude to NNPC for domestic processing.

The crude is pumped from the fields through pipelines to the oil storage tanks at the terminals where it is thereafter sent through fiscal meters to the refineries for processing into petroleum products.

Objectives

- I. Identification of payments to and offsets made by NNPC in respect of fuel subsidy and shall provide a brief commentary on the methodology used by NNPC to compute such amounts but shall not otherwise verify the amount involved.
- II. Comprehensively reconcile the information disclosed by the reporting entities and identify any discrepancies.

The Refineries and their installed production capacity in barrels per day are stated in table below:

Table 7.1: Daily Refining Capacities

Refinery	Capacity
Port Harcourt Refining Company (PHRC) – Old	65,000BPD
Port Harcourt Refining Company (PHRC) – New	150,000BPD
Warri Refining and Petrochemical Company Limited (WRPC)	120,000BPD
Kaduna Refining and Petrochemical Company (KRPC)	110,000BPD
Total	445,000 BPD

The four refineries operate below name plate capacity and the combined production output is insufficient to meet domestic fuel requirements, hence the introduction of product importation became imperative. The NNPC / PPMC introduced **off shore processing /swap arrangements** to augment local refining in order to ensure adequate petroleum products supply. Product

importation therefore, consists of direct product importation, offshore processing Arrangements (OPA) and the exchange of crude for finished products (SWAP).

In view of the inadequacy of the petroleum products supplied by NNPC, licenses were granted by PPPRA to other independent marketers to import the products. To this effect, subsidy is paid on such products to both NNPC and independent marketers.

7.2 Determination of Subsidy payments

7.2.1 Background

Fuel subsidy was introduced as a policy in Nigeria during the Military rule when the refineries failed due to poor maintenance. This policy, which was introduced as a temporary measure to stabilise the price of petroleum products and cushion the comparatively high price of imported products while the local refineries underwent rehabilitation, has since become a standing policy of successive governments. The policy that was meant to last for just six months has now lasted for more than two decades.

PPPRA defines Subsidy as reimbursement to the Marketers based on the landing cost of the product, less its approved ex- depot price. It is a mechanism that is designed to present the real costs incurred by marketers in the process of products procurement while ensuring that end users pay a limited amount for the product.

The subsidy claims are computed based on the following considerations:

- (i) Shore - tank volume confirmed by the PPPRA appointed Inspectors and Federal Ministry of Finance Auditors.
- (ii) The reference-pricing period is 5 days around MV bill of lading dates using PPPRA pricing template based on the period of calculation.

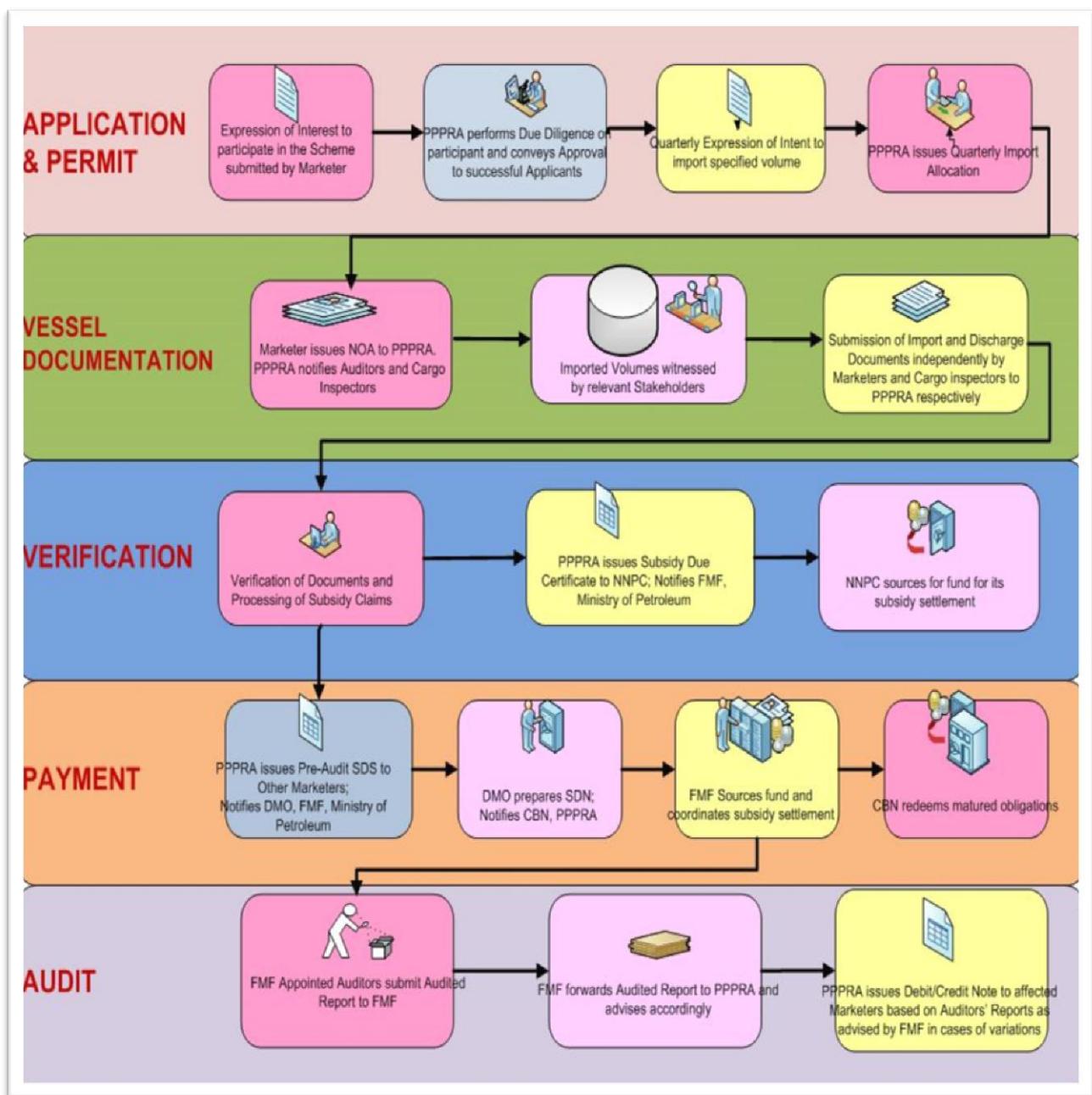
The payments are processed in batches for the marketers that meet 80% truck out. This is done twice in a month.

PROCESSING OF SOVEREIGN DEBT STATEMENTS (SDS) AND SOVEREIGN DEBT NOTES (SDN)

The Finance Department of PPPRA confirms the computation of subsidy from PSF unit and signs the summary sheet while the Audit signs the final copy. The Finance department issues the Sovereign Debt Statement (SDS). The signatories on SDS are AGM (Finance), GM (Operations) and the Executive Secretary (ES) in that order. The legal unit seals the SDS.

Debt Management Office (DMO) issues Sovereign Debt Note (SDN) to the marketers. The DMO will notify PPPRA, Ministry of Finance Auditor and CBN. The SDS qualifies marketers to get SDN from DMO. The marketers receive the payment of the value on the SDN from the CBN as issued by DMO at maturity date.

Figure 7.2 - PPPRA-System of Authorities and Procedures within PPPRA on Subsidy Process flow Chart



Source: PPPRA

7.2.2 Subsidy Regime

The PPPRA employs Import Parity Principle, which is referred to as pricing template. This includes:

- Landing cost of the product
- Margins for the marketers, Dealers and Transporters
- Jetty- Depot through-put
- Other charges and Taxes.

The objectives of the pricing templates are to ensure transparency, full cost recovery, fairness and efficiency in the importation process.

Based on the above considerations, PPPRA determines the applicable subsidy per litre for the product on daily basis. The subsidy for any petroleum product is obtained by multiplying the quantity of product by the under-recovery rate.

Where the ex-depot price (which is arrived at by deducting the distribution margins from the open market price) is higher than the landing cost, there is over-recovery and the oil marketing companies would be required to pay back to the Federal Government the amount of worked over-recovered. When it is lower, the marketers are entitled to be paid the under-recovery from the government through PPPRA who issues Sovereign Debt Statements (SDS) and forwards them to DMO that issues Sovereign Debt Notes (SDN) to the marketers to be redeemed at the Central Bank of Nigeria. The redemption is being done through the excess crude oil Naira account domiciled with the CBN as against the earlier position when payments were done from the Petroleum Support Fund account domiciled with the Central Bank of Nigeria.

According to the Agency, Subsidy gap = open market price - pump price.

7.2.3 Computation of Subsidy

Generally, subsidy per litre or the under-recovery rate is the difference between landing Cost and the Ex Depot Price of the petroleum product. Landing cost is calculated thus:

For Imported products:

Landing Cost = Product Price per Litre X Exchange Rate +Freight+ lightering +Jetty Cost + Financing +Trader's margin

Litres per metric tonne (1,341 litres)

For Locally Refined Products:

Freight, Finance Charges, Trader's Margin and lightering Charges are excluded from Landing Cost.
(Note: lightering charge is part of Product cost on PPPRA Price Template)

7.2.4 The Petroleum Support Fund (PSF)

The Government established the Petroleum Support Fund (PSF) with effect from 2006 as an intervention fund. The Petroleum Support Fund (PSF) is a pool of funds provided for by the three tiers of Government to stabilize the domestic prices of petroleum products against volatility in international crude and product prices. For details on the PSF see: <http://pppra.gov.ng/o/psf/>

7.2.4.1 Eligibility for Drawing from the Fund

Oil Marketing/Trading Companies are expected to meet the rules and regulations set by the PPPRA on the management /administration of the Petroleum Support Fund (PSF) as follows:

- i. Applicant must be an Oil Marketing/Trading Company registered in Nigeria with the Corporate Affairs Commission (CAC) to conduct petroleum products business.
- ii. Beneficiary/Claimant must possess the following:
 - a. Proof of Ownership or a valid throughput agreement of storage facility with a minimum of 5,000 metric tons for the particular product. Ownership of retail stations is an added advantage.
 - b. Possession of a valid DPR import permit.
- iii. Having satisfied 1 and 2 above, an applicant shall submit application for participation in the Scheme to the PPPRA.
- iv. Successful applicants shall sign an agreement with the PPPRA to become a participant under the Scheme.
- v. Approval to import shall be expressly conveyed by the PPPRA to the participant Importer.
- vi. Beneficiary/Claimant must be notify PPPRA within a minimum of three (3) days ahead of cargo arrival in the country and furnish the PPPRA with the relevant documents including copies of invoices, bills of landing, source of funding and expected date of arrival for documentation.
- vii. The product loading and arrival time must be within a maximum of 30 days and must meet products specification by the DPR and SON.
- viii. All approvals for importation are valid for a maximum of three months based on the current PPPRA quarterly importation plan.
- ix. Deliveries must be made to depot location approved by the DPR and witnessed by PPPRA Operatives, External Auditors and the Industry Consultant.
- x. All documents forwarded to the PPPRA must contain shore tank report duly signed by PPPRA Representatives at discharge locations.
- xi. (i) All out-turn deliveries to approved locations must be through invoices at approved ex-depot prices.
(ii) Marketers shall render out-turn delivery returns which must contain the invoiced ex-depot prices and volumes to the PPPRA as part of conditions for continued participation in the Scheme.

In 2012, the PPPRA management put in place additional Policy measures that the oil marketers need to fulfil before they could be eligible. The full additional policy is at the end of the report.

7.3 Product Quantities for Which Subsidies Were Processed for Payment in 2013

The volume of petroleum products supplied by the marketers through the PPPRA under the PSF scheme in 2013 was 10.245 billion litres for Premium Motor Spirit (PMS). Other marketers did not import Dual Purpose Kerosene (DPK) during the period under review.

NNPC imported 7.315billion litres of PMS and 2.650billion litres of DPK, while the refineries produced 1.768billion litres of PMS and 828.715million litres of DPK during the same period. These volumes are shown in the table below and form the basis for which subsidies were processed by the PPPRA and advised to NNPC.

Table 7.3 - Summary of Quantities of Petroleum Products Supplied by Marketers in 2013

MARKETERS	2012 QUANTITY (Litres '000)	2013 QUANTITY (Litres '000)	INCREASE / (DECREASE) QUANTITY (Litres '000)
Other marketers through PPPRA			
PMS	7,714,725	10,244,813	2,530,088
DPK	-	-	-
SUB -TOTAL	7,714,725	10,244,813	2,530,088
NNPC			
PMS- Import	7,948,354	7,315,033	(633,321)
Local	1,788,373	1,768,105	(20,268)
DPK (HHK) -Import	2,576,591	2,650,451	73,860
Local	750,313	828,715	78,402
SUB TOTAL	13,063,631	12,562,304	(501,327)
GRAND TOTAL	20,778,356	22,807,117	2,028,761

In comparison with the 2012, imported quantity of Premium Motor Spirit (PMS) supplied by marketers through PPPRA substantially increased by 32.8% from 7.714billion litres in 2012 to 10.245 billion litres in 2013. On the other hand, NNPC importation decreased marginally from 7.948billion litres of PMS in 2012 to 7.315billion litres of PMS in 2013 given a percentage decrease of about 7.97%.

7.4 Subsidies Claimed by NNPC in 2013

Of the total sum of **N792.961 billion** subsidy processed and advised to the NNPC by the PPPRA for 2013, NNPC deducted **N138.487 billion** at source from the domestic crude oil proceeds. Schedule of subsidy deductions are shown below:

S/N	MONTH	AMOUNT (N)	REMARK
1.	NOVEMBER, 2013	64,462,736,421.84	
2.	DECEMBER, 2013	74,024,366,783.75	
	TOTAL	138,487,103,205.59	

Source: CMOD

NOTE: Out of the total volume of 10,244,813,039.80 litres discharged in 2013, a total of 10,217,678,005.80 litres was processed for subsidy claims, while the balance of 27,135,034.00 litres was said to have been processed in 2014 and not included in the table above.

The affected transactions are shown in the table below:

TRANS REF NO.	MARKETER	OBSERVED SHORETANK QUANTITY (LTRS)	BATCH
BEL/3301/BLA/PMS/24/12/13	BLACKLIGHT ENERGY LIMITED	10,365,185.00	B/14
FIR/3879/FIR/PMS/28/10/13	FIRST DEEP WATER DISCOVERY LTD	8,581,574.00	S/14
FIR/3880/FIR/PMS/05/11/13	FIRST DEEP WATER DISCOVERY LTD	8,188,275.00	S/14
GRAND TOTAL		27,135,034.00	

Source: PPPRA

Data requested from the Office of the Accountant General of the Federation (OAGF) and Federal Ministry of Finance- Budget office of the Federation, were not provided for corroboration as at the time of reporting.

7.5 Summary of Subsidies Paid on Each Product

Petroleum products are imported based on quarterly allocation granted to marketers by PPPRA. PPPRA templates were analysed to obtain information on subsidy processed for payment to oil marketers. This is to ascertain the total expected expenditure on subsidy for the period under review.

Table 7.5 - Summary of Subsidy Processed by the PPPRA to be paid by Federal Government for 2013

Product/Entity	TOTAL	TOTAL	INCREASE / (DECREASE)
	2012	2013	
	N'000	N'000	N'000
Other Marketers through PPPRA			
Premium Motor Spirit	461,040,708	522,665,347	61,624,639
Dual Purpose Kerosene	-	-	-
Sub-Total	461,040,708	522,665,347	61,624,639
NNPC-PMS-IMPORT	452,748,698	355,532,600	(97,216,098)
LOCAL PRODUCTION	83,034,724	72,105,642	(10,929,082)
NNPC- DPK (HHK)-IMPORT	284,908,781	284,398,871	(509,910)
LOCAL PRODUCTION	73,054,313	80,924,030	(7,869,717)
Sub-Total	893,746,516	792,961,143	(100,785,373)
Grand Total	1,354,787,224	1,315,626,490	(39,160,734)

The total subsidy processed for payments for 2013 amounted to N1.316 trillion. This shows a marginal reduction from N1.355 trillion in 2012 as reported in the last audit. This gives a reduction of about 2.88% from 2012.

However, from the table above there was an increase of N61.6billion in the subsidy processed for payment by PPPRA for other marketers in 2013 over that of last audit. This gives an increase of about 13.37%. The subsidy processed for the NNPC in the same period decreased by N100.8billion. This gives a decrease of about 11.28%.

7.6 Product Volumes of (PMS) Imported by the Importers in 2013

The number of importers in 2013 remains the same as at the last audit of 2012. The quantity of premium motor spirit (PMS) imported by marketers through PPPRA increased from 7.714 billion litres in 2012 to 10.245 billion litres in 2013.

The quantity of premium motor spirit (PMS) imported by NNPC decreased marginally from 7.948 billion litres in 2012 to 7.315 billion litres in 2013.

Out of a total volume of 17.560 billion litres of PMS imported in 2013, Independent Oil Marketers accounted for 58.34% while NNPC accounted for the balance of 41.66%. This was in contrast with that of 2012 when NNPC imported 50.62% of PMS and Other Oil marketers accounted for 49.38%.

7.7 Issuance of SDSs by PPPRA

The PPPRA issued SDSs in favour of the individual oil marketers which were processed and issued to the tune of N522, 665,346,576.34 for 2013.

Table 7.7 – SDSs Issued for 2013

BATCHES	SDS ISSUED FOR 2013
A/13	19,367,797,940.75
B/13	17,531,518,579.42
C/13	19,906,694,232.28
D/13	32,898,428,758.27
E/13	32,005,884,035.88
F/13	29,467,038,868.91
G/13	27,017,928,196.61
H/13	24,385,608,458.53
I/13	14,629,609,018.43
J/13	22,305,104,419.93
K/13	41,085,289,507.45
L/13	32,027,278,635.18
M/13	22,417,245,295.23
N/13	22,249,467,142.93
O/13	41,074,772,210.95
P/13	25,129,596,789.94
Q/13	10,945,279,656.11
R/13	24,044,601,540.83
S/13	9,131,513,386.61
T/13	36,000,732,246.68
U/13	14,315,365,072.37
V/13	1,265,256,234.89
W/13	3,463,336,348.16
	522,665,346,576.34

SDSs worth of N502,710,742,305.83 were sent to DMO by the PPPRA in 2013. These were made up of batches B/12D to B/12F, H/12 and T/12 to Y/12 that were meant for 2012 and batches A/13 to O/13 out of 2013 batches.

7.8 Issuance of SDNs by DMO

According to PPPRA, the Agency is no longer handling the payment of subsidy claims to oil marketers since the introduction of the Sovereign Debit Notes (SDN) in 2010. The role of the agency is now limited to the computation/ processing of the subsidy claims and the issuance of the sovereign debit statements are then forwarded to DMO. The DMO is responsible for the issuance

of SDNs to be given to the individual oil marketers for presentation at the Central Bank of Nigeria for redemption.

The DMO explained that the SDNs were being financed through the excess crude oil account and the issuance of the SDN is dependent on the availability of funds. Because of this, the maturity dates indicated on the SDSs by the PPPRA were no longer considered at the time of redemption of the SDNs but availability of funds.

In 2013, SDSs valued at N554,369,806,670 were processed by the DMO and SDN valued at N495,182,079,201.12 were issued leaving a balance of N59,187,727,469.28 untreated in 2013 and carried forward to 2014.

The sum of N459,363,650,296 was released to the marketers out of SDN issued in 2013, leaving a balance of N35,818,428,905.11 not released as at 31st December, 2013.

The total SDNs of N459,363,650,296.01 that were issued and released in 2013 are as follows:

	N
SDNs issued and released in 2013	422,457,903,563.13
SDSs from 2012 & SDNs issued & released in 2013	<u>36,905,746,732.88</u>
	<u>459,363,650,296.01</u>

The total SDNs released by the DMO in 2013 are stated below.

	N
Total SDNs issued and released in 2013	459,363,650,296.01
SDNs issued in 2012 but released in 2013	<u>77,666,307,344.22</u>
Total SDNs released in 2013	<u>537,029,957,640.23</u>

The details of the above are presented in **Appendix 7.8**

7.9 Over Paid Subsidy due to Currency Exchange Differentials

The two companies with overpaid subsidy on account of foreign exchange differentials are listed in the table below:

Table 7.9 - Over paid subsidy due to currency exchange differentials

S/N	MARKETERS		SDN NUMBER	Actual Subsidy Claim(N)	Subsidy over Paid due to Currency Differentials	REMARK
1.	MOBIL OIL NIG PLC	J/ 13	FGN/2013/J13/1109	946,932,114.70	653,867,350.47	Difference due to foreign exchange differentials
2.	MRS OIL NIG PLC	K/13	FGN/2013/01//K13/1133	1,777,025,263.81	58,893,414.38	Difference due to foreign exchange differentials

The actual subsidy claims that were processed for each company are shown in the table above. It is out of the amount due to each company that the over payment on foreign exchange was deducted.

From each company, the amount indicated as over payment that was deducted from the subsidy paid to each company were as follows.

1. Mobil Oil Nigeria Plc N653,867,350.47
2. MRS Oil Nigeria Plc N58,893,414.38

The above sums were deducted based on an indemnity issued by each company to the Federal Government in respect of interest and foreign exchange differential cost claims. The deductions were done by the DMO before the SDNs to be presented at the CBN were issued and the CBN Governor was so informed about the deductions.

Hence, the amount stated on the new SDN for presentation at the CBN is as shown below.

S/N	MARKETERS	BATCH NO	SDN NUMBER	VALUE (N)
1.	MOBIL OIL NIG PLC	J/13	FGN/2013/J13/1109	293,064,764.23
2.	MRS OIL NIG PLC	K/13	FGN/2013/01/K13/1133	1,718,131,849.43

Copies of the SDNs with the above stated sum were sighted by us in the audit review.

LITIGATION

The result of a concluded court case between Petrotrade Energy Ltd and First Deepwater Discovery in 2013, led to additional SDN of N822,019,407.61 shown in the table below.

S/N	MARKETERS	BATCH NO	SDN NUMBER	VALUE (N)
1	TEMILOLU ADAMOLEKUN (COUNSEL TO PETROTRADE ENERGY LTD)	Y/12	FGN/2012/ 01/Y/12/1052A	622,239,656.19
2	FIRST DEEP WATER DISCOVERY LTD	Y/12	FGN/2012/01/Y/12/1052B	199,779,751.42
TOTAL				822,019,407.61

7.10 Summary of Petroleum Subsidy Payments (SDNs Redeemed) in 2013 by CBN

The summary of SDNs worth N536,649,743,180.67 that were presented by the oil marketers and redeemed by the CBN in 2013 is presented in the table below:

Table 7.10 - Summary of fuel subsidy payments SDNs redeemed by the CBN in 2013

S/N	COMPANY	AMOUNT PAID BY CBN =N=
1	ACORN PETROLEUM PLC	4,793,919,922.02
2	AITEOENERGY RESOURCES LTD	19,373,267,363.21
3	ASCON OIL LIMITED	8,086,288,716.48
4	AVIDOR OIL AND GAS LTD	2,466,028,389.68
5	A-Z PETROLEUM PRODUCTS LTD	9,399,872,304.90
6	BOVAS & COMPANY LTD	11,878,608,365.02
7	CAADES OIL & GAS LTD	993,558,199.59
8	CARNIVAL ENERGY OIL AND GAS LTD	1,228,505,189.42
9	CHANNEL OIL AND PETROLEUM LTD	4,122,261.58
10	CONOIL PLC	22,005,498,332.75
11	CRUST ENERGY LTD	580,350,230.85
12	DEE JONES PETROLEUM & GAS LTD	9,777,187,085.06
13	DOZZY OIL AND GAS LTD	6,172,960,876.72
14	EXXONMOBIL OIL NIGERIA PLC	1,410,071,941.98
15	FIRST DEEP WATER DISCOVERY LTD	2,183,277,791.71
16	FOLAWIYO ENERGY LTD	40,754,775,925.87

S/N	COMPANY	AMOUNT PAID BY CBN =N=
17	FORTE OIL PLC	10,055,414,102.52
18	FRESH SYNERGY LTD	3,090,636,679.23
19	GULF TREASURES LTD	10,371,470,495.11
20	HEYDEN PETROLEUM LTD	7,050,899,858.30
21	IBAFON OIL LTD	3,472,609,457.78
22	INTEGRATED OIL AND GAS LTD	9,022,129,811.06
23	IPMAN INVESTMENT LTD	3,673,120,854.57
24	IPMAN REFINERY AND MARKETING COY LTD	6,550,439,520.60
25	LINETRALE OIL SUPPLY & TRADING CO LTD	478,139,066.60
26	MASTERS ENERGY OIL AND GAS LTD	10,534,817,382.14
27	MATRIX ENERGY LTD	6,389,581,280.16
28	MENOL OIL AND GAS	470,015,597.25
29	MIDAS OIL AND GAS LTD	582,783,372.34
30	MOBIL OIL NIGERIA PLC	10,966,180,999.18
31	MRS OIL AND GAS COMPANY LTD	28,262,707,285.83
32	MRS OIL NIGERIA PLC	18,995,888,184.84
33	NIPCO PLC	34,871,910,212.86
34	NORTHWEST PETROLEUM & GAS CO LTD	13,192,480,299.10
35	OANDO PLC	54,234,684,004.24
36	OBAT OIL AND PETROLEUM LTD	5,298,244,753.27
37	PINNACLE CONTRACTORS LTD	1,410,607,033.74
38	PVN CAPITAL LTD	554,616,852.30
39	QUAGGA OILS LTD	991,078,979.66
40	RAHMANIYYA OIL AND GAS LTD	12,416,726,808.09
41	RAINOLE LTD	17,281,533,316.00
42	RONALD OIL AND GAS LTD	485,964,762.47

S/N	COMPANY	AMOUNT PAID BY CBN =N=
43	SAHARA ENERGY RESOURCES	40,589,754,987.32
44	SEA PETROLEUM & GAS CO LTD	3,483,922,289.08
45	SHEILD PETROLEUM COY NIGERIA LTD	1,395,444,505.12
46	SHORELINK OIL AND GAS SERVICES LTD	20,950,424,329.63
47	SOMERSET ENERGY SERVICES LTD	1,984,458,230.43
48	SUPREME AND MITCHELLS OIL LTD	1,336,503,755.28
49	SWIFT OIL LTD	13,376,346,212.69
50	TECHNO OIL LTD	17,644,038,390.80
51	TEMILOLU ADAMOLEKUN &Co. Counsel to IPMAN	622,239,656.19
52	TEMPO ENERGY LTD	1,513,868,528.14
53	TOP OIL AND GAS DEVELOPMENT CO LTD	2,093,786,610.95
54	TOTAL NIGERIA PLC	19,385,013,051.91
55	XALON PETROLEUM LTD	460,968,767.05
	TOTAL	536,649,743,180.67

The redeemed SDNs in 2013 as contained in the CBN template for 2013 audit made available to us stood at N536,649,743,180.67.

When the redeemed SDNs of N536,649,743,180.67 is compared with what was redeemed in 2012 which was N430,818,739,406.12, there was an increase of N105,831,003,774.55 over that of last audit. This gives a percentage increase of 24.57% which is an improvement in the settlement of the oil marketers subsidy claims.

When N536.650billion is compared with the total SDNs of N602.385billion available for presentation at the CBN in 2013, SDNs worth N65.735billion were yet to be presented at the CBN as at 31st December, 2013. The reconciliation is as shown below:

The total SDNs available for presentation at the CBN for redemption in 2013 are stated below

	N'000
1. SDNs issued and released in 2013	N422,457,904
2. SDNs issued in 2012 but released in 2013	77,666,307
3. 2012 SDSs but SDNs issued & released in 2013	<u>36,905,747</u>
	N537,029,958
4. Balance b/f	<u>65,355,034</u>

Sub-total	N602,384,992
LESS Amount Redeemed in 2013 by CBN	<u>536,649,743</u>
Balance C/F to 2014	<u>N65,735,249</u>

The balance that was not presented at CBN as at 31st December 2013 by the oil marketers amounted to N65.735billion.

DMO explained that the possible delays in the processing of SDNs were caused partly by the following factors:

- With effect from August 2012, the process of issuing SDNs took longer time because the Minister of Finance's approval needed to be sought and obtained before payments could be effected;
- Issuance of SDNs depended on the availability of funds;
- Companies under investigation during the fuel subsidy probe were embargoed not to be paid until they were cleared by the agents of government handling the investigations.
- Some transactions were classified as legitimate and non-legitimate
- Companies that were unable to get clearance.
- Maturity dates on the SDNs were no longer taken into account. It was the PPPRA that normally indicated the maturity dates on the SDSs based on 45 days processing and payment but this was no longer a factor.
- The SDNs issued were like a bond. They did not carry a time limit, hence it made it difficult to determine which period the marketer redeemed the SDN collected.

7.11 Reconciliation of Payments of Subsidy by the Federal Government with Amount Received by Importers

The SDNs issued and released by the DMO to the oil marketers in 2013 were reviewed against the schedule of redeemed Sovereign Debt Notes got from the CBN.

The SDNs issued and those released by the DMO in 2013 stood at N537.030billion and adding the outstanding of N65.355billion as at 31st December, 2012 gives a total of N602.385billion.

- Total sum of **N602.385billion** SDNs available for presentation at the CBN in 2013,
- Total sum of **N536.650billion** redeemed by CBN in 2013
- Balance of **N65.735billion** yet to be redeemed as at 31st December, 2013.

The bank statements through which the subsidy payments were made by the Central Bank of Nigeria were not made available for review by the Central Bank of Nigeria as at reporting date.

However, from the template submitted by CBN, it was stated that the payment was made through the Excess Crude Oil Naira account domiciled in CBN. This is contrary to the earlier policy that the payment should be made through the PSF Account domiciled with the CBN.

It is difficult to establish how much of the 2013 subsidy processed and the SDNs issued in 2013 by the DMO was paid because the holder of the SDNs can present it at any convenient time to CBN for redemption since the SDNs carry no time limit. Audit could also not carryout independent circularization and confirmation of amounts paid to each marketer due to late submission of information on the marketers.

The schedule of the redeemed SDNs made available by the CBN madedid not indicate the batch numbers while the SDN numbers provided by the DMO did not indicate when they were issued. The maturity dates were only indicated on the SDNs without indicating when it could expire. This means the holder can present it at the CBN at any time.

The total SDNs available for presentation at the CBN for redemption in 2013 are stated below

		N'000
1.	SDNs issued and released in 2013	N422,457,904
2.	SDNs issued in 2012 but released in 2013	N77,666,307
3.	2012 SDSs but SDNs issued & released in 2013	<u>N36,905,747</u>
		N537,029,958
4.	Balance b/f	<u>N65,355,034</u>
	Sub-total	N602,384,992
	LESS Amount Redeemed in 2013	<u>N536,649,743</u>
	Balance C/F to 2014	<u>N65,735,249</u>

7.12 Approved Allocation to Import In 2013

The table below shows relative performances of imported PMS quantity discharged in metric tons and their contributions to the overall volume discharged in 2013.

Table 7.12 - Marketers in 2013 - Performance Evaluation Appraisal

S/N	COMPANY NAME	TOTAL QUANTITY APPROVED MT	TOTAL CHARGED MT	TOTAL DISCHARGED SUMMARY GOV	PERFORMANCE RELATIVE TO APPROVAL %	CONTRIBUTION TO TOTAL QUANTITY DISCHARGED %
1	NNPC	5,400,000	6,773,406.30	9,117,721,909	125.43%	45.23%
2	A & E Energy Ltd	30,000	14,521.21	19,653,090.00	48.40%	0.10%

S/N	COMPANY NAME	TOTAL QUANTITY APPROVED MT	TOTAL CHARGED MT	TOTAL DISCHARGED SUMMARY GOV	PERFORMANCE RELATIVE TO APPROVAL %	CONTRIBUTION TO TOTAL QUANTITY DISCHARGED %
3	ACORN PET. LTD	30,000	31,337.91	42,706,146.00	104.46%	0.21%
4	AITEO ENERGY LTD	465,000	420,234.35	571,595,295	90.37%	2.81%
5	ASCON OIL LTD	165,000	169,991.74	235,485,892	103.03%	1.14%
6	AVIDOR OIL & GAS LTD	210,000	110,531.48	151,257,149	52.63%	0.74%
7	A-Z PET. LTD	210,000	211,915.78	288,380,528	100.91%	1.41%
8	BLACKLIGHT LTD	90,000	109,466.46	150,168,562	121.63%	0.73%
9	BOVAS LTD	195,000	201,245.56	273,314,998	103.20%	1.34%
10	BULK STRATEGIC LTD	15,000	14,893.65	20,421,374	0.00%	0.10%
11	CAPITAL OIL & GAS LTD	30,000	0	0	0.00%	0.00%
12	CONOIL PLC	300,000	296,785.33	404,457,615	98.93%	1.98%
13	CYBERNETICS	50,000	51,630.11	70,286,282.00	103.26%	0.34%
14	DEEJONES PET. LTD	210,000	187,598.55	256,201,244	89.33%	1.25%
15	DOZZY OIL & GAS	165,000	149,769.20	203,653,052	90.77%	1.00%
16	FATGBEMS	25,000	24,967.39	34,158,082.00	99.87%	0.17%
17	FIRSTDEEPWATER LTD	100,000	33,477.58	44,983,593.00	33.48%	0.22%
18	FOLAWIYO ENERGY LTD	480,000	482,350.80	662,410,370	100.49%	3.22%
19	FORTE OIL PLC	300,000	315,318.72	426,172,987	105.11%	2.11%
20	FRESH SYNERGY LTD	45,000	44,133.35	60,330,420	98.07%	0.29%
21	GULF TREASURE LTD	120,000	114,018	155,027,591	95.02%	0.76%
22	HEYDEN PET. LTD	120,000	92,438.22	125,830,918	77.03%	0.62%
23	HUDSON	20,000	18,414.86	25,222,213.00	92.07%	0.12%
24	HYDE ENERGY LTD	60,000	56,926.80	78,634,739.00	94.88%	0.38%
25	IBAFON OIL LTD	60,000	60,563.40	82,163,035	100.94%	0.40%
26	IMAD OIL & GAS	30,000	0	0	0.00%	0.00%
27	INDEX PETROLEUM	20,000	18,779.70	25,510,172.00	93.90%	0.13%
28	INTEGRATED OIL & GAS LTD	225,000	215,884.52	296,917,230	95.95%	1.44%

S/N	COMPANY NAME	TOTAL QUANTITY APPROVED MT	TOTAL CHARGED MT	TOTAL DISCHARGED SUMMARY GOV	PERFORMANCE RELATIVE TO APPROVAL %	CONTRIBUTION TO TOTAL QUANTITY DISCHARGED %
29	IPMAN REFINING & MKTING LTD	30,000	32,775.94	44,788,646	109.25%	0.22%
30	LINC OIL & GAS	30,000	30,135.78	40,879,903.00	100.45%	0.20%
31	MAINLAND OIL & GAS LTD	75,000	70,805.83	97,528,501.00	94.41%	0.47%
32	MARTIX ENERGY LTD	90,000	91,554.00	124,785,097.00	101.73%	0.61%
33	MASTERS ENERGY LTD	260,000	250,511.30	328,076,491.00	96.35%	1.67%
34	METTLE ENERGY LTD	45,000	37,951.84	51,608,410.00	84.34%	0.25%
35	MOBIL OIL PLC	240,000	235,616.94	323,302,420	98.17%	1.57%
36	MRS OIL & GAS LTD	240,000	126,966.58	173,873,755	52.90%	0.85%
37	MRS OIL NIG PLC	240,000	178,304.46	245,081,779	74.29%	1.19%
38	NEPAL OIL & GAS LTD	90,000	79,142.36	108,129,922.00	87.94%	0.53%
39	NIPCO PLC	570,000	535,185.47	729,497,584	93.89%	3.57%
40	NORTHWEST PET. LTD	285,000	310,406.72	422,385,280	108.91%	2.07%
41	OANDO PLC	555,000	534,256.46	737,888,427	96.26%	3.57%
42	OBAT OIL	60,000	56,504.54	77,129,431.00	94.17%	0.38%
43	RAHAMANIYYA	130,000	131,324.59	178,873,407	101.02%	0.88%
44	RAIN OIL LTD	345,000	363,136.40	495,570,031	105.26%	2.42%
45	SAHARA ENERGY RES. L	240,000	238,060.41	323,264,371	99.19%	1.59%
46	SHORELINK OIL	320,000	300,344.87	412,197,280	93.86%	2.01%
47	SWIFT OIL LTD	225,000	241,311.73	330,178,531	107.25%	1.61%
48	TECHNO OIL	365,000	369,779.53	503,759,582	101.31%	2.47%
49	TEMPOGATE	40,000	39,357.15	53,732,183.00	98.39%	0.26%
50	TOTAL NIG. PLC	390,000	412,059.32	566,067,034	105.66%	2.75%
51	TSL LTD	90,000	90,733.97	124,598,794	100.82%	0.61%
TOTAL		14,125,000	14,976,827	20,315,861,345	106.03%	100.00%

Source: PPPRA

7.12.1 Key Findings on approved import allocation for 2013

1. The total approved quantity (metric tonne) compared with the total quantity discharged indicates that there were a few companies including NNPC that exceeded the allocated quantity.
2. A few of these companies performed below average while three of them did not import any petroleum products .. The companies are Bulk Strategic Ltd, Capital oil & Gas Ltd and Imad Oil & Gas.

Implication

The companies involved in poor performance may have collected foreign exchange which could have been diverted for other uses other than importation of petroleum products.

Recommendations

1. PPPRA should put in place an efficient means of monitoring actual imports against the approved allocation to import.
2. Bulk Strategic Ltd, Capital oil & Gas Ltd and Imad Oil & Gas should be black listed from future participation in the import process and investigated in order to ascertain what they might have used the FOREX allocated for.

7.13 Subsidy Reinvestment and Empowerment Programme (Sure-P)

In January, 2012, the decision to remove the subsidy on Premium Motor Spirit (PMS) was announced by government, the pump price was before January, 2012 put at N140 / litre. Since then, the subsidy that is paid to the oil marketers that are involved in the importation of PMS is based on a price-gap of N97 per litre instead of the former N65/litre.

The Government proposed to save the price differential of N32/ litre from the increased pump price as a genuine intention of the government on the deregulation policy. The savings is expected to be channelled to fund a combination of programmes to stimulate the economy and alleviate poverty through provision of critical infrastructures and safety projects. This initiative led to the establishment of Subsidy Reinvestment and Empowerment Programme (SURE-P) by the Federal Government to apply its share on various sectors of the economy.

In 2012, a total saving of **N309,586,964,147.85** was made by the Federal Government.

In 2013, the Office of the Accountant General of the Federation (OAGF) gave total SURE-P distribution of revenue to all tiers of Government as **N426,590,828,297.16** and the breakdown is as shown in Table 7.13 below:

Table 7.13 - SURE-P distribution to all tiers of Government

	N	
	2013	2012
Federal Govt.	180,000,000,000.00	N/A
FGN Share of Derivation & Ecology	3,711,340,206.19	39,376,305,339.25
Federal Capital Territory	3,711,340,206.19	N/A
Stabilization Account	1,855,670,103.09	N/A
FGN Share of Development of Natural Resources	6,235,051,546.39	N/A
Total to FGN including FCT	195,513,402,061.86	181,723,280,399.61
State Governments	N/A	72,200,288,033.65
Local Government Councils	N/A	55,663,395,714.59
Total to States and Local Govt. Councils	231,077,426,235.32	127,863,683,748.24
Grand Total	426,590,828,297.18	309,586,964,147.85

Source: Office of the Accountant General of the Federation (Ministry of Finance)

7.14 Review of PPPRA- PSF Financial Statements

The 2013 audited financial statement for Petroleum Support Fund (PSF) was not made available for audit review. We asked them about the credit balance of **N5,426,632,690.37** as at 31st December, 2012 in the PSF account as at the 2012 audit.

From the CBN statement made available, the amount had increased to **N5,508,041,747.92**. We were also made to understand that when the Accountant-General of the Federation was mopping up all government's account in 2013, this credit balance of **N5,508,014,747.92** was transferred out of Account No 0020196441019 on September 11, 2013 leaving the account with a nil balance.

7.15 Determination of National Demand of refined Product

NNPC with all stakeholders in the downstream industry determine the national consumption of refined product. Relevant information is gathered from the refineries to determine their production level for the next quarter, at least two months ahead of the arrival of the first cargoes. Land-based stocks and marine stocks are also established.

On these bases, the likely shortfall of petroleum products is determined. Twenty days of products sufficiency as a buffer is also put into consideration and provided. At the end of this exercise, the shortfall between demand for products and local production by refineries are established and is covered by imports.

Currently, there is no standard model for determining national consumption for petroleum products.

7.15.1 Oil marketing Companies Over-recovered Subsidy Claims

The under listed debts are with respect to unremitted over-recovery reported in the 2012 audit report for which PPPRA is yet to conclude the reconciliations of the Marketers' accounts.

Debtor	Amount (N)
• NIPCO Plc.	966,740,379.56
• AMG Petro Energy Ltd	96,439,912.38
• NNPC	2,652,263,000

PPPRA provided documents to the effect that the debts of AMG Petro Energy Ltd of **N96,439,912.38** and that of NIPCO Plc amounting to **\$966,740,379.56** have been fully recovered from subsequent under-recoveries, interest charges and Foreign Exchange due to the two companies while that of NNPC is yet to be recovered. NNPC formally confirmed this outstanding debt and said the process of paying the over-recovered amount into the PSF/PPPRA Account domiciled with the CBN has commenced.

The documents provided were not verified to the records to confirm these recoveries as at the time of reporting.

7.15.1.1 Key Findings on subsidy payments and reconciliations.

The following issues were observed with respect to payments and reconciliation of subsidy in 2013:

- a. NNPC continuous deduction of subsidy at source despite previous NEITI recommendations
- b. NNPC outstanding debts of **N3.981 Billion** as a result of over-recovery under Petroleum Support Fund Scheme (PSF) mentioned in 2012 NEITI Audit report is yet to be paid. NNPC formally confirmed this outstanding debt and said the process of paying the over-recovered amount into the PSF/PPPRA Account domiciled with the CBN has commenced.

Implication

- a. Deduction of subsidy at source from domestic crude Oil revenue is contrary to Federal Government Financial Regulation.
- b. Non-payment of outstanding amount by NNPC has created shortfalls in the PSF Account.

Recommendations

- a. NNPC to ensure strict compliance with Federal Government Financial Regulations and all subsidy claims by the corporation should be processed like other marketers.
- b. NEITI to ensure refund of amount due from NNPC.

CHAPTER EIGHT

8 PHYSICAL AND PROCESS AUDIT

8.1 Gas Utilization

8.1.1 Introduction

Nigeria is endowed with abundant natural gas resources, which in energy terms, is in excess of the Nations proven crude oil reserve. The current reserve estimate of Nigeria's gas is over 120 trillion cubic feet, with about 50/50 distribution ratio between Associated Gas (AG) and Non Associated Gas (NAG). Only a small fraction of this quantity is currently being utilized.

A major concern has been that only a small fraction of this quantity is currently being utilized, while a large fraction of the AG produced during the production of crude oil is currently being flared. This is a considerable improvement in the level of AG being flared presently which is between 7% - 17% from what it used to be three years ago, when it flared between 70% to 80%.

In order to diversify its revenue base, reduce the huge wastage of valuable resource by optimizing gas utilization and thus stemming the degradation of the environment as a result of flaring, the Nigerian Government has embarked on a number of natural gas utilization projects with its joint venture partners whereby associated gas would be harnessed to achieve these objectives.

In addition, a Gas Master Plan, which seeks to provide a guide for the commercial exploitation and management of Nigeria's gas sector, was approved in 2008 but details of the strategies are still sketchy.

The Gas Master Plan aims at growing the Nigerian economy by pursuing three key strategies:

- i. Stimulate the multiplier effect of gas in the domestic economy
- ii. Position Nigeria competitively in high value export markets
- iii. Guarantee the long term energy security of Nigeria

It is against this background that the audit has sought to review the procedures for the protection of Government interest and ensure optimum gas utilization.

8.1.2 The Gas Value Chain

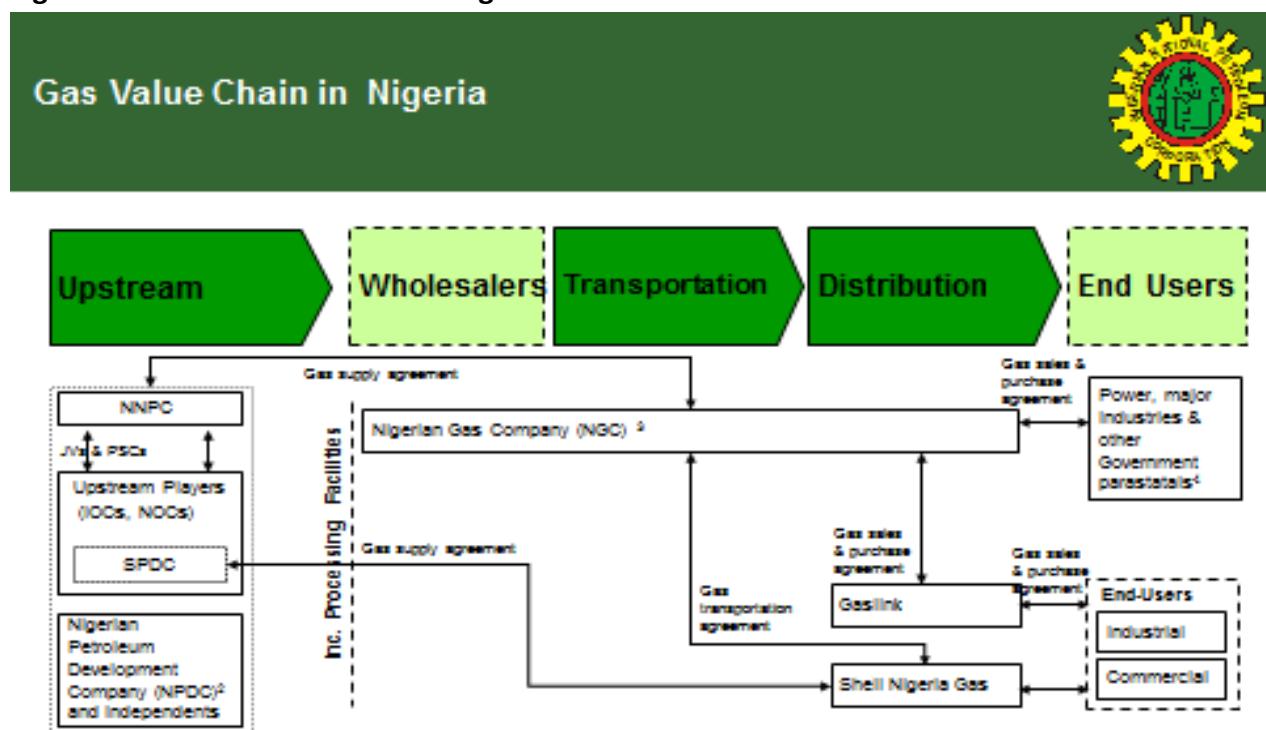
The gas supply activity involves buying natural gas directly from the upstream source and the major players are the NNPC, JV partners, and some PSCs as producers while the NLNG and NGC remain the major buyers from these producers.

The NLNG obtains its feedstock mainly from the JVs and export the Liquefied Natural Gas (LNG) directly to the export market whereas the Nigeria Gas Company (NGC) is the major player in the domestic Gas Value Chain.

The sources of supply of gas to NGC are:

- Shell Petroleum Development Company (East)
- Chevron Nigeria Limited (West) supply from Escravos field.
- Pan Ocean Oil Corporation (West) supply from Ogharefe field.
- Nigeria Petroleum Development Company (West) Utorogu and Oredo oil and gas field
- Seplat Petroleum Development Company (West)

Figure 8.1.2 – Gas Value Chain in Nigeria



¹ Currently, NGC is the single buyer of gas from upstream producers to supply the domestic market.

² NPDC is the Nigerian Petroleum development Company and is a wholly owned subsidiary of NNPC.

³ NGC is 100% owned by NNPC and owns the only high pressure transportation network in Nigeria, as well as some low pressure distribution networks.

⁴ Government parastatals like National fertilizer Company of Nigeria (NAFCON) , Alajo steel company (ALSCON) & Ajakuta steel Company (ASC) & major Industries like Dangote Cement & PZ Industries get supplied directly by NGC.

3

The end users of domestic gas supply through NGC can be classified as Commercial, Power or Industrial. Shell supplies Gas to NGC for Notore (Fertiliser Industry), Afam Power plant, EHGC and Ibom Power Plant.

8.1.3 Gas Supply Arrangements

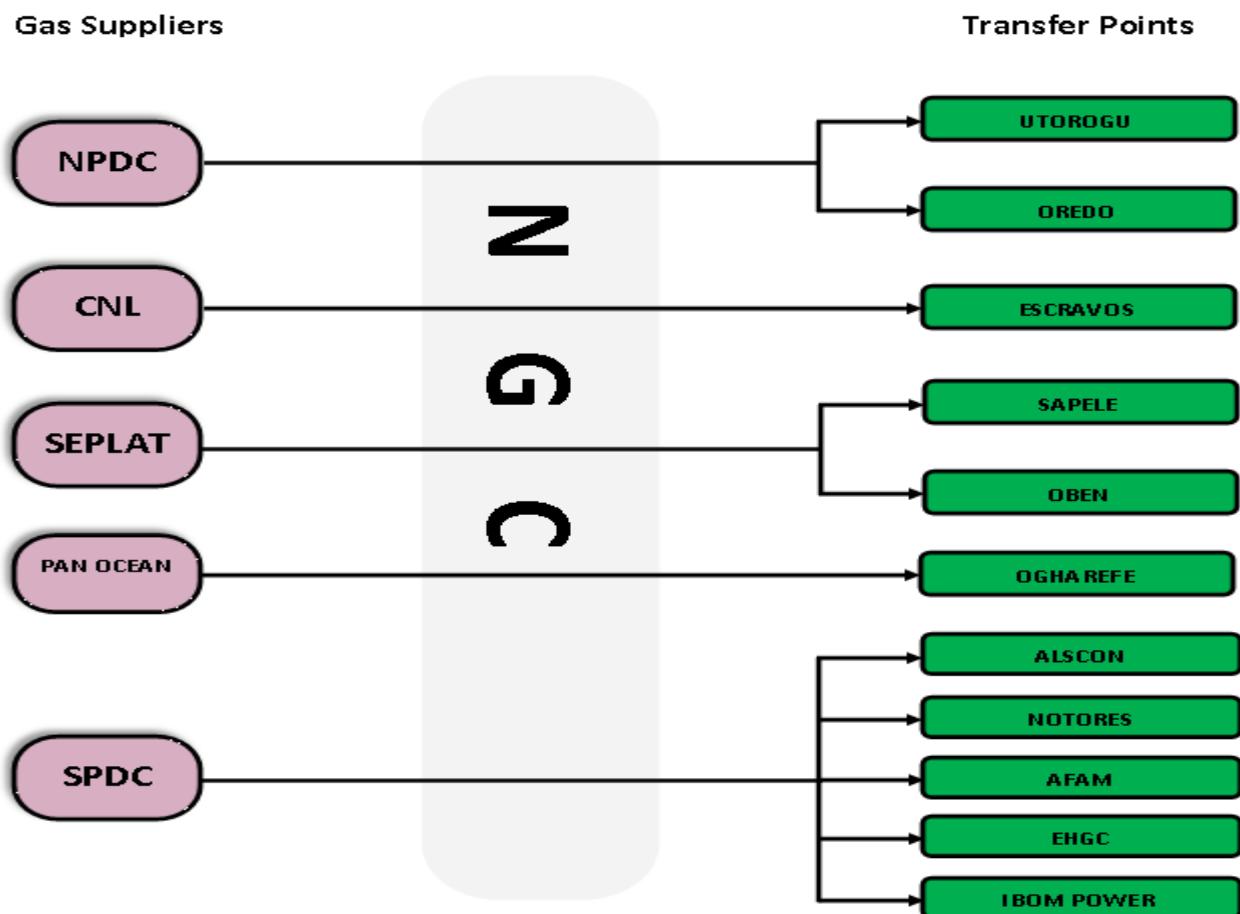
The arrangement for gas supply has been through long term Gas Supply Agreements (GSAs) and Gas Purchase Agreements (GPAs) between the two major buyers (NLNG and NGC) and the Gas Producers.

Payment by NLNG and NGC are made directly to the accounts of each of the parties involved in the production arrangements, for example payment for gas produced from the MOBIL JV operations, which was the largest producer in 2013 according to the production templates, are made directly to the accounts of NNPC, and MOBIL in accordance with each party's equity participation in the JV arrangement.

It is noted that within the JV production arrangements, there are also special gas projects e.g. the Natural Gas Liquid projects (NGL) consisting of NGL1 and NGL2 which gathers gas from all the MOBIL fields, compress, extract and inject lean gas to recover natural gas liquids from associated gas produced in the East Area reservoirs from blocks OML 67, 68 and 70. The NGL project is a special arrangement between MPN and NNPC outside the MOBIL JV.

The domestic gas supply through NGC and the transfer points are shown in the diagram below.

Figure 8.1.3 – Domestic Gas Supply



8.1.4 Gas Price Determination

Although, the Federal Government has the overall responsibility to determine the price of gas through the Minister of Petroleum (after carefully considering the input from the stakeholders),

Gas pricing still remains a contentious issue in the Nigeria oil and gas industry; there is no clear-cut policy or formulae for price determination. In addition, several agencies of government (e.g NNPC, PPPRA, NERC) have at one time or the other made pronouncements on price changes. The strategic importance of domestic gas supply especially for the Nigeria power sector is to a large extent responsible for the strong influence of government in the fixing of the price of gas.

For example, the Nigeria Electricity Regulatory Commission recently approved an upward review of the gas price from \$1.5 per thousand cubic feet, MCF, to \$2.5 per MCF as short-term approach to address the challenge of inadequate gas supply to thermal power generation plants across the country.

The new gas-to-power pricing benchmark also included 80 cents as transportation cost per MCF for new electricity generation capacity.

The approval of the price review had also triggered fears about the plan by government to increase electricity tariffs by about 40 per cent but the power producers are yet to adjust to the new arrangement more than two months after it was approved.

Accordingly, the gas-pricing regime is such that there are different prices for different industries or end users. Audit findings on NGC pricing methods further indicate discretionary pricing in some instances.

The price regime for 2013 domestic gas from different suppliers as obtained from NGC are as shown below:

Table 8.1.4A - Shell Petroleum Development Company Gas Prices

COMPANY SUPPLIED	PRICE/MSCF =N=	REMARK
ALAKIRI (NOTORE) Gas Plant	106.96	Power Plant
ALSCON Gas Plant	38.81	Power Plant (lower price)
OBIGBO Gas Plant	155.24	Power Plant
IBOM Gas Plant	155.24	Power Plant
UNICEM / EAST HORIZON	388.11	Commercial

**At the time ALSCON was privatized the federal government granted price subsidy to RUSAL, the company that bought over the ALSCON as an incentive which was part of the purchase agreement.*

Table 8.1.4B - SEPLAT Gas Prices

COMPANY SUPPLIED	NGN PRICE/MSCF =N=	REMARK
SAPELE GAS PLANT	155.24	Power Plant
“ “ “	388.81	Commercial
OBEN STATION	155.24	Power Plant

Table 8.1.4C - PAN OCEAN Gas Prices

COMPANY SUPPLIED	NG PRICE/MSCF =N=	REMARK
Gas Plant	155.24	Power Plant
Commercial	388.81	Commercial

Table 8.1.4D - NPDC / ND WESTERN

COMPANY SUPPLIED	NG PRICE/MSCF =N=	REMARK
Gas Plant	155.24	Power Plant
Commercial	388.81	Commercial
OREDO Gas Plant	157.30	Power Plant
Commercial	393.24	Commercial

The unit price (=N=38.81) of gas sales to ALSCON, which is low as compared to other gas plants that were supplied in the period under review further, confirms the existence of various pricing arrangements in the gas industry.

The amount fixed for the gas producers is shown in the table below.

Table 8.1.4E - 2013 Gas Producer Price in Dollar

End User	Price
Gas to Commercial	\$2.5/MSCF
Gas to Power	\$ 1.0/MSCF

8.1.5 Gas Production and Utilization

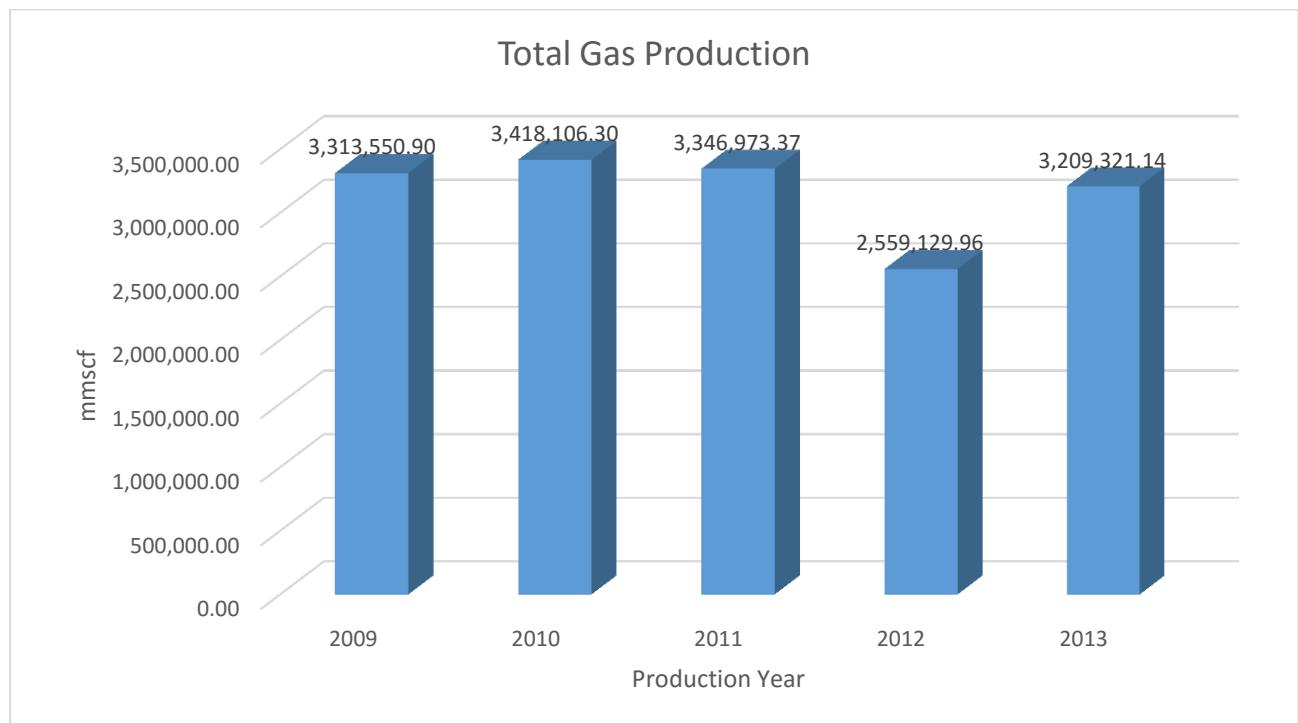
The total gas production and utilization (sales, re-injection/lift and fuel) and quantity flared in 2013 is compared with previous years and shown in table below.

Table 8.1.5A – Comparison of Gas Production and Utilization between 2009 - 2013

Usage (mmscf)	2009	2010	2011	2012	2013
A. Total Gas Production	3,313,550.90	3,418,106.30	3,346,973.37	2,559,129.96	3,209,321.14
Gas Sales	842,515.24	1,265,966.87	1,436,856.29	588,345.91	1,198,756.94
Gas Flared	1,641,516.72	1,279,272.84	884,357.98	369,500.14	373,178.46
Utilised/Fuel Gas	95,997.14	115,738.97	129,329.38	123,247.79	154,601.76
B. Total (Sales, Flared, Utilised/Fuel)	2,580,029.10	2,660,978.68	2,450,543.65	1,081,093.84	1,726,537.16
C. Gas Re-injected **	595,528.02	756,124.53	764,261.90	1,224,915.32	814,269.32
D. Total (B+ C)	3,175,557.12	3,417,103.21	3,214,805.55	2,306,009.16	2,540,806.48
E. Difference (A-D)	137,993.78	1,003.09	132,167.82	253,120.80	668,514.66

Difference = Unaccounted Gas (this may be due to vandalism of Gas lines)

Figure 8.1.5A – Comparison of Gas Production and Utilization between 2009 – 2013



The graph shown above indicates an increased gas production in 2013 compared to 2012, this may be partially attributable to the failure of SPDC (a major Gas producer) to submit Gas Volumetric Template for the 2012 Audit.

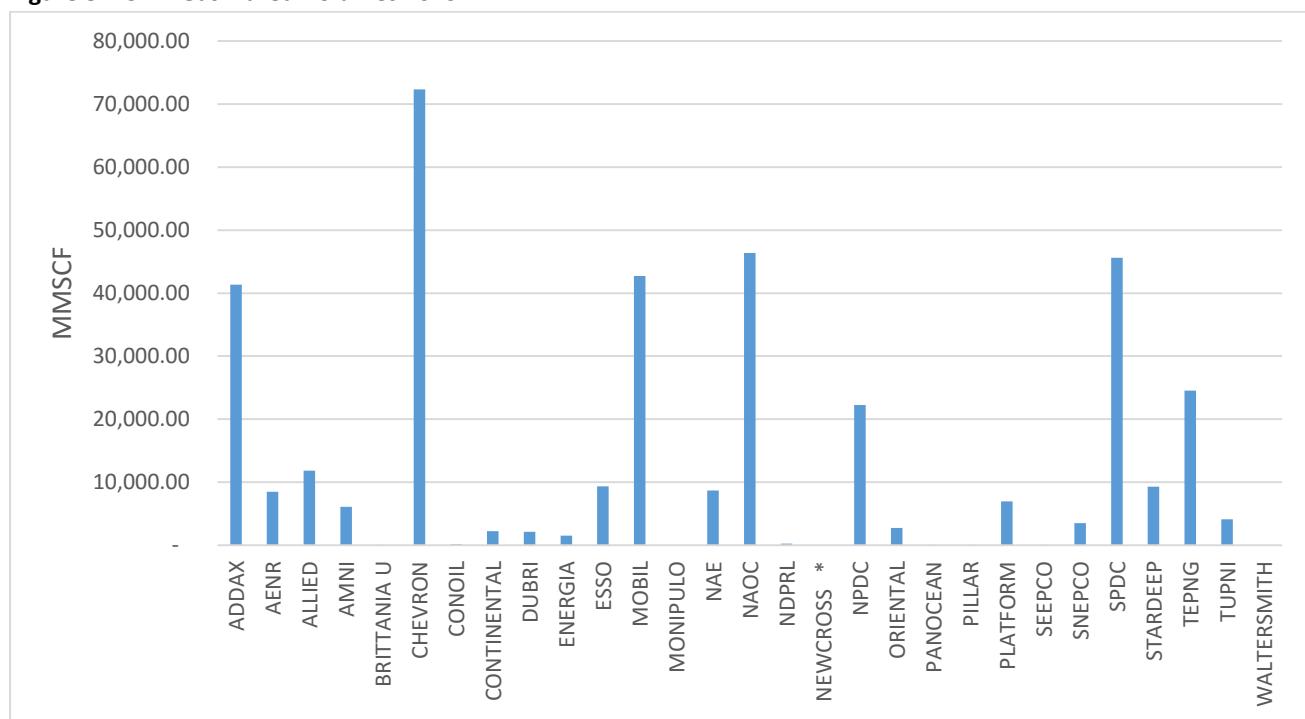
The individual company's gas production and its utilization is shown in the table below while gas flaring activity in 2013 is depicted in the graph.

Table 8.1.5B – Summary of Gas Production and Utilization 2013

COMPANIES	GAS PRODUCED	UTILIZED/FUEL	REINJECTED	FLARED	SALES
ADDAX	66,181.00	2,558.00	20,422.00	41,337.61	
AENR	8,598.15	85.52	-	8,512.63	
ALLIED	14,917.03	886.20	2,184.38	11,846.45	
AMNI	7,346.74	204.27	1,034.32	6,090.86	
BRITTANIA U	382.66	325.53		63.16	
CHEVRON	243,958.32	27,967.08	34,269.25	72,331.11	129,862.44
CONOIL	214.95	53.11		161.88	
CONTINENTAL	2,360.22	110.80		2,249.43	
DUBRI	2,194.18	26.80		2,167.38	
ENERGIA	2,040.42	113.40		1,552.92	
ESSO	121,103.76	6,525.94	105,199.08	9,378.74	
MOBIL	889,914.65	33,077.86	335,732.51	42,733.34	
MONIPULO	439.66				
NAE	13,065.18	1,083.03	3,116.24	8,724.29	
NAOC	565,866.89	38,504.97	13,035.96	46,387.22	252,276.07
NDPRL	9,071.49	93.76		254.26	8,610.20
NEWCROSS *					
NPDC	23,394.94	1,100.66		22,234.10	
ORIENTAL	3,309.82	543.86	916.13	2,765.95	

COMPANIES	GAS PRODUCED	UTILIZED/FUEL	REINJECTED	FLARED	SALES
PANOCEAN	7,049.42	449.74		82.48	6,443.64
PILLAR	92.53			92.53	
PLATFORM	7,229.09	244.41		6,984.68	
SEEPSCO	807.50	512.47	240.65	73.61	
SNEPCO	47,000.70	4,002.57		3,545.14	39,601.07
SPDC	590,053.10	13,269.14	9,356.30	45,612.53	528,851.72
STARDEEP	156,815.50	8,071.19	139,413.93	9,330.37	
TEPNG	233,384.15	8,033.43	86,741.04	24,528.50	114,085.68
TUPNI	192,203.75	6,737.61	62,302.72	4,137.28	119,026.13
WALTERSMITH	325.35	20.40	304.80		
TOTAL	3,209,321.14	154,601.76	814,269.32	373,178.46	1,198,756.94

Figure 8.1.5B – Gas Flared Volumes 2013



From the above chart, Chevron flared the highest volume of gas in 2013 as was the case in 2012. Chevron flared 72,331.11 mmscf of gas, which is 19.382% of the total gas flared volume of 373,178.48 mmscf.

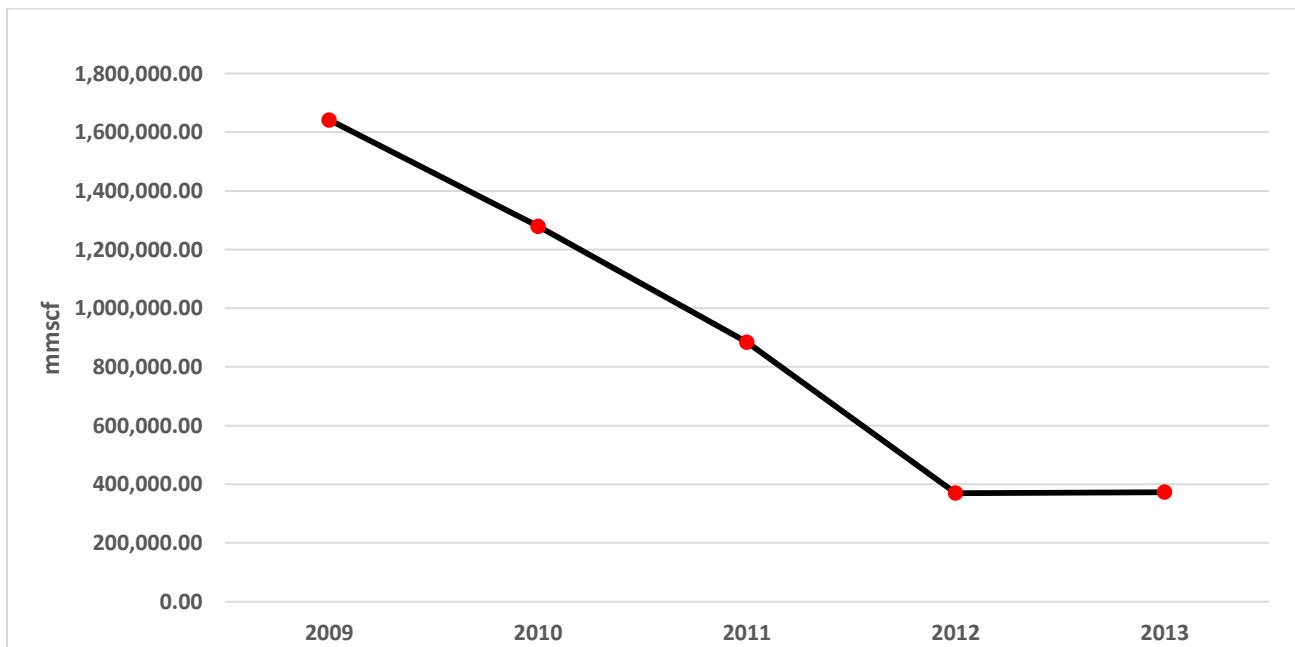
The table below shows the percentage of gas flared as a proportion of total gas productions from 2009 to 2013.

Table 8.1.5C – Gas flared as a proportion of gas produced from 2009 - 2013

Usage (mmscf)	2009	2010	2011	2012	2013
A. Total Gas Production	3,313,550.90	3,418,106.30	3,346,973.37	2,559,129.96	3,209,321.14
Gas Flared	1,641,516.72	1,279,272.84	884,357.98	369,500.14	373,178.46
% of Gas Flared to Production	49.54%	37.43%	26.42%	14.44%	11.63%

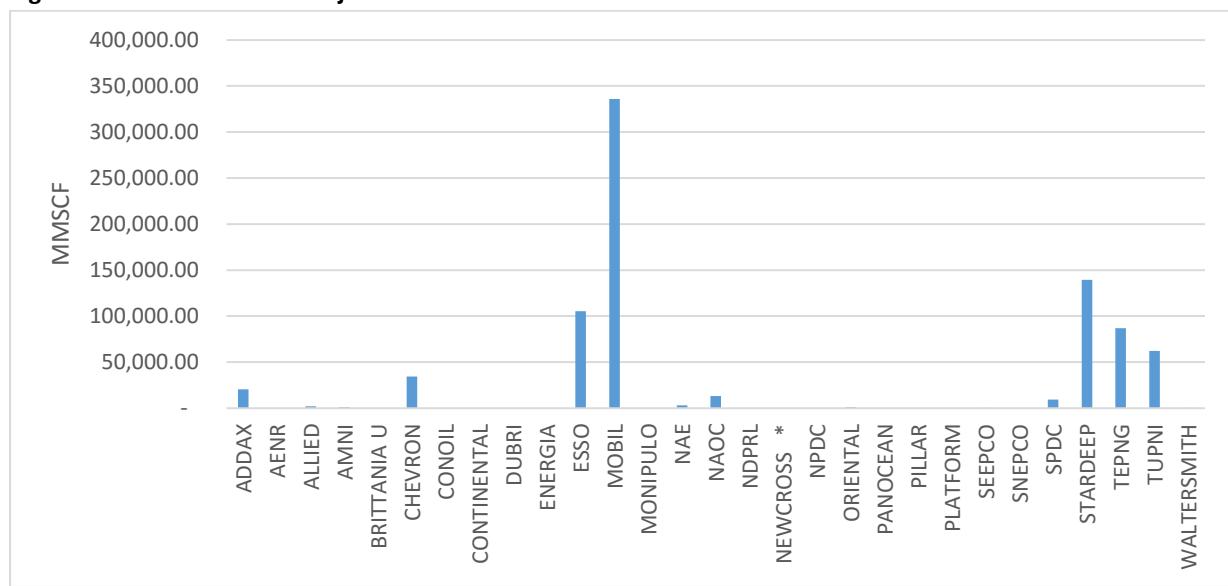
The total volume of gas flared in 2013 is 11.63% of total gas production as against 14.44% in 2012. This decline in flared gas volume was attained as a result of increased gas sales.

Figure 8.1.5C – Comparison of Gas Flared Volumes 2009 - 2013



The table below shows companies re-injected gas volumes:

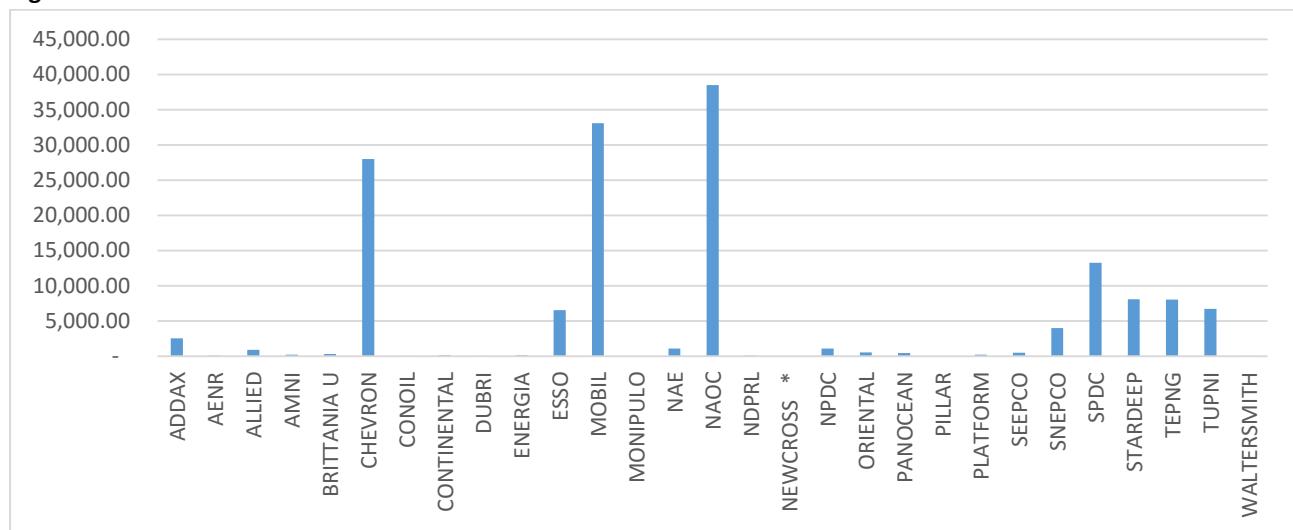
Figure 8.1.5D – 2013 Gas Reinjected Volumes



The overall re-injected volumes in 2013 is 814,269.32 mmscf which is a 33.525% decrease on 2012 re-injected volumes of 1,224,915.32 mmscf. Mobil Producing Nigeria Unlimited (MPNU) re-injected the highest volume of gas in 2013 accounting for 41.231% of the overall re-injected gas in 2013. This greater utilization of gas by MPNU is as a result of the NGL projects.

Gas is re-injected into formation to assist oil production. Some oil reservoirs need gas pressure to push oil to the surface. If this gas pressure depletes, the desired rate of oil production will be affected. To maintain the desired reservoir pressure, the gas is re-injected into the reservoir to assist oil flow to the surface. This gas is not sold or lost, but re-cycled in operation to produce more oil. The graph below shows gas utilization volumes by companies.

Figure 8.1.5E – 2013 Gas Utilized Volumes



There were also unaccounted gas volumes as populated in the company templates and shown in the Gas summary table above. A total of 669,950.27 mmscf of gas could not be accounted for, out of which NAOC records 241,734.59 mmscf as unaccounted gas.

Table 8.1.5D - Further Analytical Review of Gas Sales Volumes- Using Trend Analysis

	2012	2013	
	Volume	Volume	Changes
	MT'000	MT'000	%
1st Quarter	231	210	-9%
2nd Quarter	150	244	63%
3rd Quarter	122	219	80%
4th Quarter	147	214	46%
Cumulative Total	649	886	37%

Table 8.1.5E - Further Analytical Review of NLNG Feedstock Sales Volumes- Using Trend Analysis

	2012 Volume MBTU'000	2013 Volume MBTU'000	% Changes
1st Quarter	183,620	149,587	-19%
2nd Quarter	177,878	145,414	-18%
3rd Quarter	193,856	151,395	-22%
4th Quarter	176,193	178,026	1%
Cumulative Total	731,548	624,422	-15%

The two scenarios above, are further analysed in the trend analyses depicted in the graphs below.

Figure 8.1.5F - Further Analytical Review of Gas Sales Volumes- Using Trend Analysis

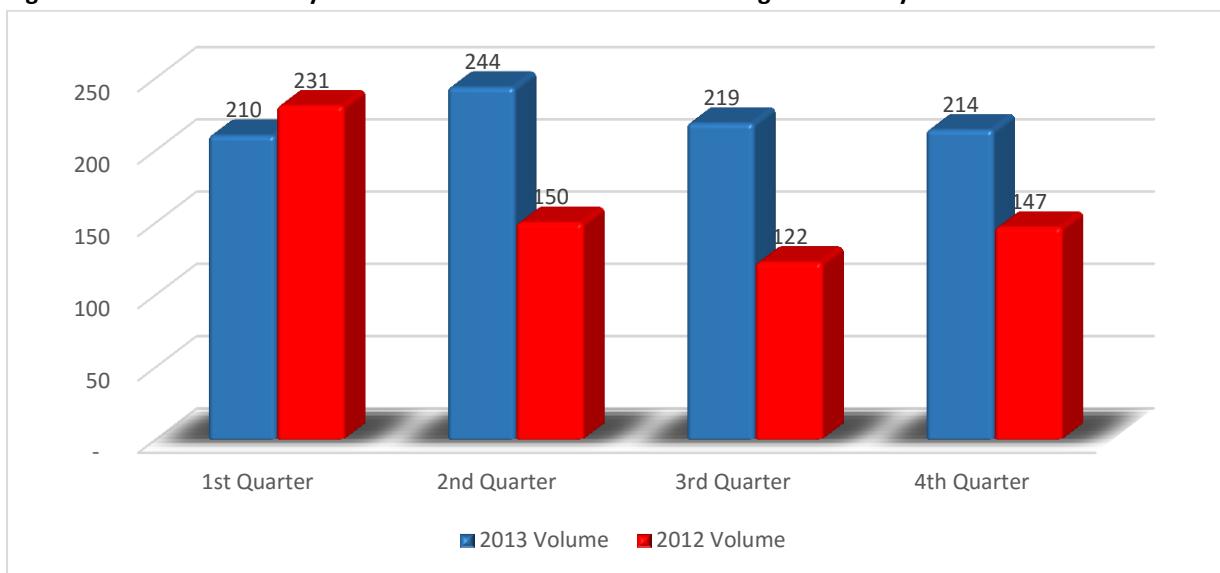
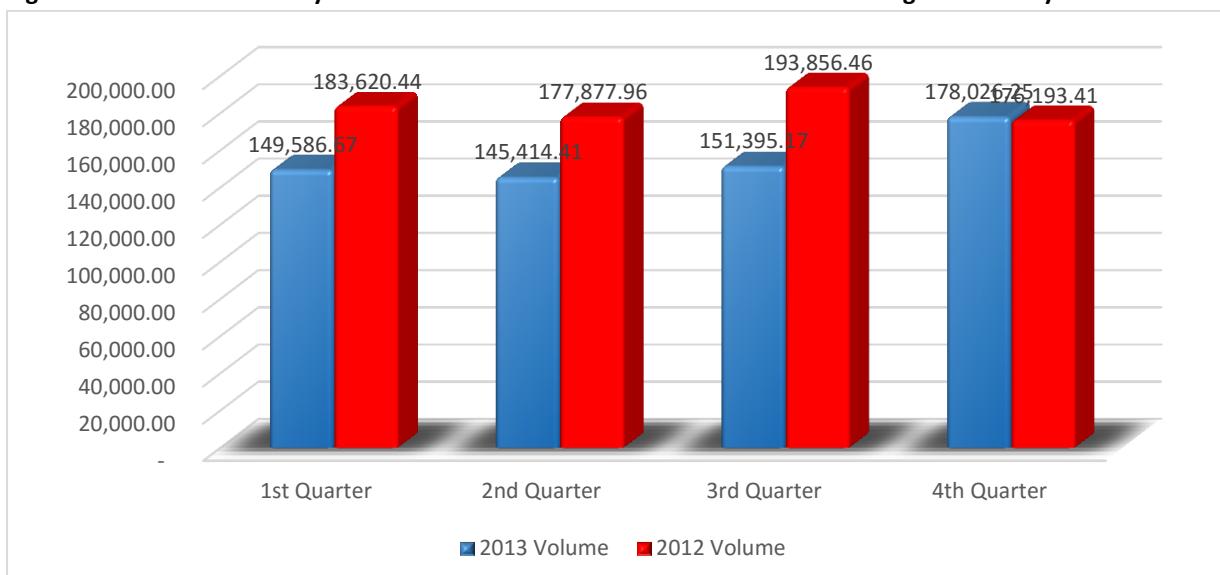


Figure 8.1.5G - Further Analytical Review of NLNG Feedstock Sales Volumes- Using Trend Analysis



The previous year's quarter volumes were used as Comparative Base Volume to show the changes in gas and feedstock volumes accruable to the Federation in the graphs above. A detail result of the validation of gas and feedstock revenue accruable to the Federation is contained in the Federal Government Equity Crude Oil and Gas validation report.

8.1.6 Key Findings on optimal gas utilisation

Audit findings do not reveal any remarkable improvement in gas production over the period 2009 – 2013 but there seems to be a significant increase in gas utilization and a gradual decline in gas flaring trend.

Despite this seeming improvement in gas utilization over the years, progress towards zero gas flaring appears slow and inconsistent. For example, between 2010 – 2011 and 2011- 2012, gas flaring dropped by 30.9% and 58.3% respectively. Whereas between 2012 and 2013, the quantity of gas fared showed a slight increase of about 1%.

Implication

These results show that Nigeria is still far from achieving optimal gas utilization and there is the need to identify and address some of the challenges.

In the course of the audit , the following challenges were identified among others.

- i. Inadequate infrastructure and investment in the gas sector to harness the huge gas deposit.
- ii. Uncertain and Ineffective regulatory environment. Potential investors are also watching and waiting on the outcome of the PIB.
- iii. Unattractive fiscal regimes.
- iv. Lack of a proper, well-defined and attractive pricing regime that will attract investments.
- v. Lack of adequate incentives.
- vi. Insecurity and corruption.

The above factors will also impact negatively on the revenue accruable to the Federation from gas operations, which will further limit government investment in gas infrastructures.

Recommendations

1. Government to create an enabling environment for investments in the gas exploitation and development by ensuring the competitive pricing of gas, attractive fiscal regimes and provision of adequate security for gas infrastructures to prevent vandalism and sabotage.
2. Government to encourage investment in domestic gas utilization infrastructures that will meet increasing demand of gas for power, feedstock industries and other local uses.
3. Government should pass the PIB to ensure regulatory certainties.
4. Government to ensure an adequate and effective metering system in gas operations.
5. Government to review the current trend in the divestment of Federal government equity holdings in oil and gas operations. The assignment of some gas revenue yielding OMLs lacked transparency and this has greatly reduced gas and feedstock revenue accruable to the federation.

8.2 Upstream Mass Balance

8.2.1 Production Entitlement

The Federal Government gets revenue from the oil and gas industry through direct equity participation or Joint Venture (JV) with the international oil companies. The funding is done through cash calls. Each party funds the operation according to their percentage share in the operation.

As the industry grew, more companies got involved in the operation in Nigeria and funding on the Government part became a problem. The Government decided to fund emerging projects differently. With the JVs, the Government made an alternative arrangement called the 'Carry Agreement'. In this arrangement, the Government, represented by NNPC does not fund capital developments. The operators fund the capital developments. The operators then recover their costs from the Government in form of crude oil. The remaining production is then shared according to their equity holdings in the JV.

Later, the Carry Agreement was modified as 'Modified Carry Agreement'.

Under this agreement, the Government takes its share of the oil and gas produced, sells and pays cash to fund the operation.

The Federal Government issues different licences to operators in the industry under the 'production Sharing Contract' (PSC) arrangement.

Under this arrangement, NNPC owns the concession. The operators fund all expenditures in the operations of the companies. NNPC settles the liabilities of the PSCs by paying their Royalty and Petroleum Profit Tax (PPT). In this arrangement, the parties are allocated production to enable them pay for these services. Whatever is left is shared as profit oil in proportions set out in the PSC agreement.

8.2.1.1 Federation Entitlement

8.2.1.1.1 Federation Equity Crude Oil Entitlement

The Federation is entitled to oil from its participation in upstream Joint Venture operations (equity crude); and as payment in kind for Royalty, and PPT from PSCs; and as payment in kind for its share of profits arising from PSCs.

The Federation's crude oil entitlement is divided into two parts: Crude that is sold internationally (Export Crude) and Crude that is allocated for domestic use (Domestic Crude).

MARKETING

Export Crude is marketed on behalf of the Federation by NNPC Crude Oil Marketing Division (COMD) and Domestic Crude is sold to PPMC to be refined at its refineries for domestic consumption.

The Domestic Crude allocation has remained unchanged at 445,000 bpd since it was fixed by Government in 2003; this volume is the design capacity of the four refineries in Nigeria. In 2010, as a result of production inefficiency of the refineries, PPMC engaged in Alternative Production arrangements such as Offshore Processing Arrangement (OPA) and Swap Arrangements to make available products for the increasing domestic demands.

8.2.1.2 Production Entitlement by Companies

All Crude Oil producing Companies also have Crude Oil and Gas entitlements from productions depending on the equity holdings in the production arrangement. The Federation (NNPC) entitlements is as stated in section 8.2.1.1.1 above. The following additional information is to be noted with respect to company entitlements.

- For the Sole Risk Companies, NNPC does not have any entitlements to their production.
- For the PSCs, NNPC has entitlement to production as per their contractual agreement. We analysed NNPC's entitlement to PSC production through the lifting volumes from the PSC Terminals. See table 5.6 above which shows that where there is a disagreement, the parties fall back to the Production Sharing Contract (PSC) or Arbitration.
- The Joint Venture companies have equity arrangements with NNPC and as such, their entitlements are not in dispute.

8.2.1.2.1 Joint Venture

The following tables show NNPC and Companies production entitlement of crude oil for 2013. The stated entitlement are the volumes that the entities are entitled to pursuant to conditions laid down in the Joint Venture agreements (JOA). The production volumes are in Net Standard Volumes (NSV).

Table 8.2.1.2.1A - Joint Venture Entitlement to Production in 2013

Company	Production (bbls)	NNPC Equity %	NNPC share (bbls)	Company Equity %	Company share (bbls)
Shell	104,217,351	55	62,530,411	45	46,897,808
Chevron	80,123,501	60	48,074,101	40	32,049,400

Company	Production (bbls)	NNPC Equity %	NNPC share (bbls)	Company Equity %	Company share (bbls)
Nig. Agip Oil co.	19,644,380	60	11,786,628	40	7,857,752
Mobil	156,160,764	60	93,696,458	40	62,464,306
TEPNG	41,461,328	60	24,876,797	40	16,584,531
Pan Ocean	1,834,469	60	1,100,681	40	733,788
Total	403,441,793		242,065,076		166,587,585

Source: NNPC-COMD

Figure 8.2.1.2.1A - JV Entitlement to Production

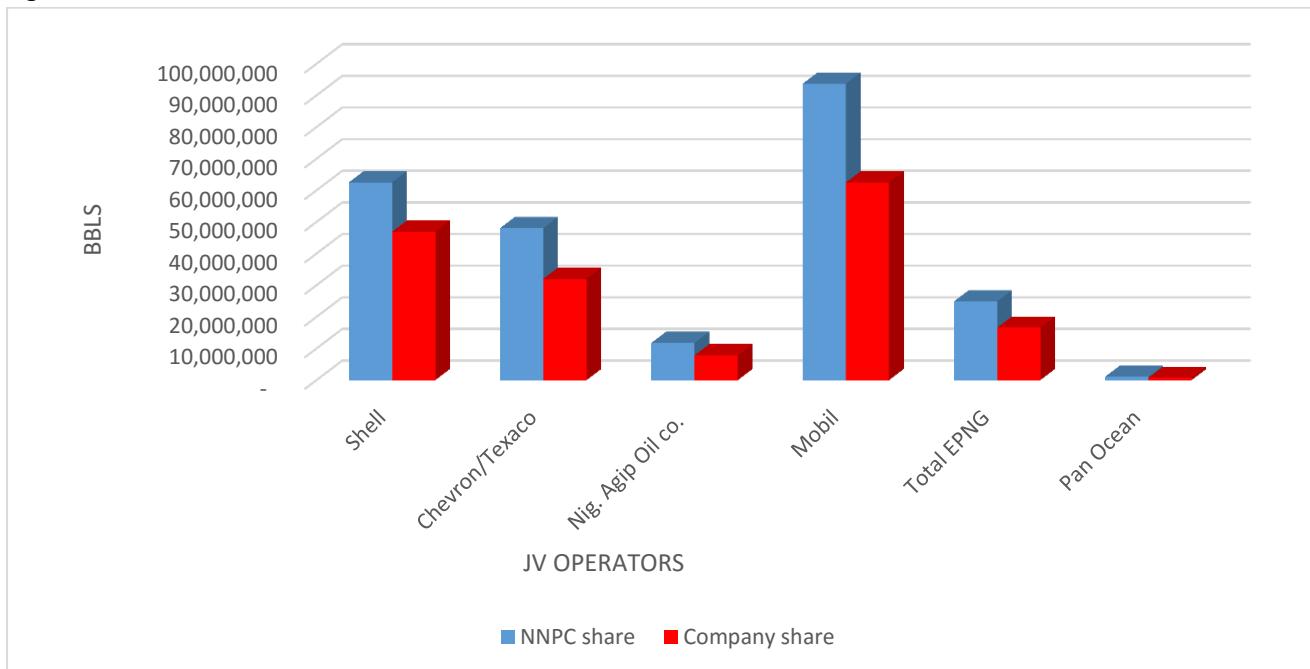


Table 8.2.1.2.1B - Comparison of Production Entitlement to Actual Volume Lifted

Company	NNPC Equity %	NNPC ACTUAL LIFTING (bbls)	VARIANCE (bbls)	Company Equity %	COMPANY ACTUAL LIFTING (bbls)	VARIANCE (bbls)
Shell	62,530,411	58,734,572	3,795,839	46,897,808	48,680,659	(1,782,851)
Chevron	48,074,101	46,531,587	1,542,514	32,049,400	32,295,313	(245,913)
Nig. Agip Oil co.	11,786,628	10,879,615	907,013	7,857,752	8,240,473	(382,721)
Mobil	93,696,458	92,596,173	1,100,285	62,464,306	62,761,809	(297,503)
TEPNG	24,876,797	24,263,112	613,685	16,584,531	14,894,472	1,690,059
Pan Ocean	1,100,681	889,244	211,437	733,788	592,830	140,958
Total	242,065,076	233,894,303	8,170,773	166,587,585	167,465,556	(877,971)

Source: NNPC-COMD

Figure 8.2.1.2.1B - NNPC Equity Volumes vs Actual Volumes Lifted

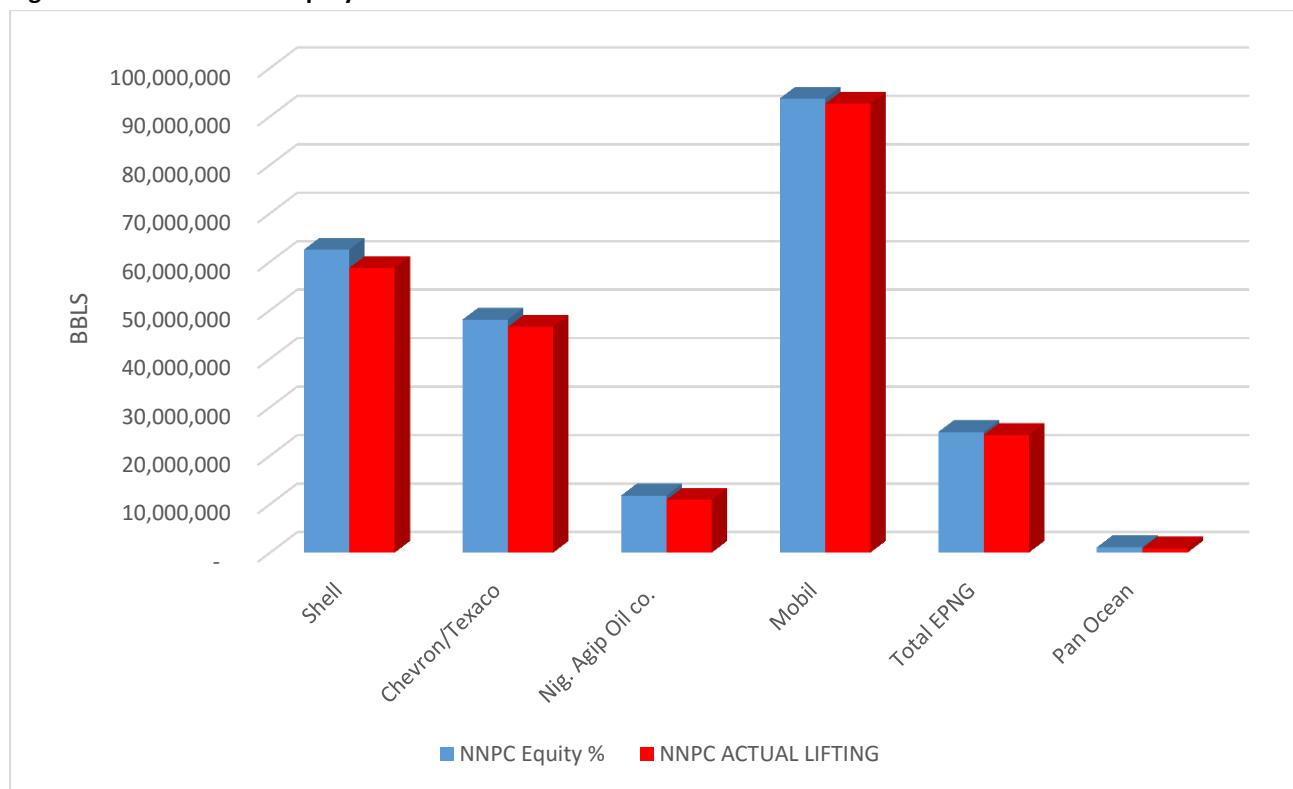


Figure 8.2.1.2.1C - Company Equity Volumes vs Actual Volumes Lifted

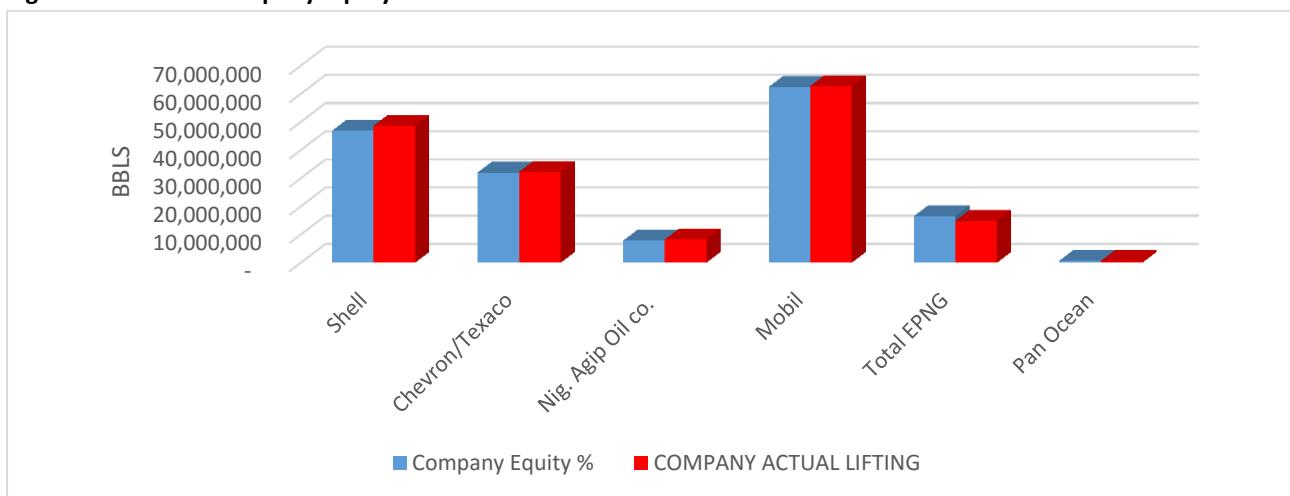
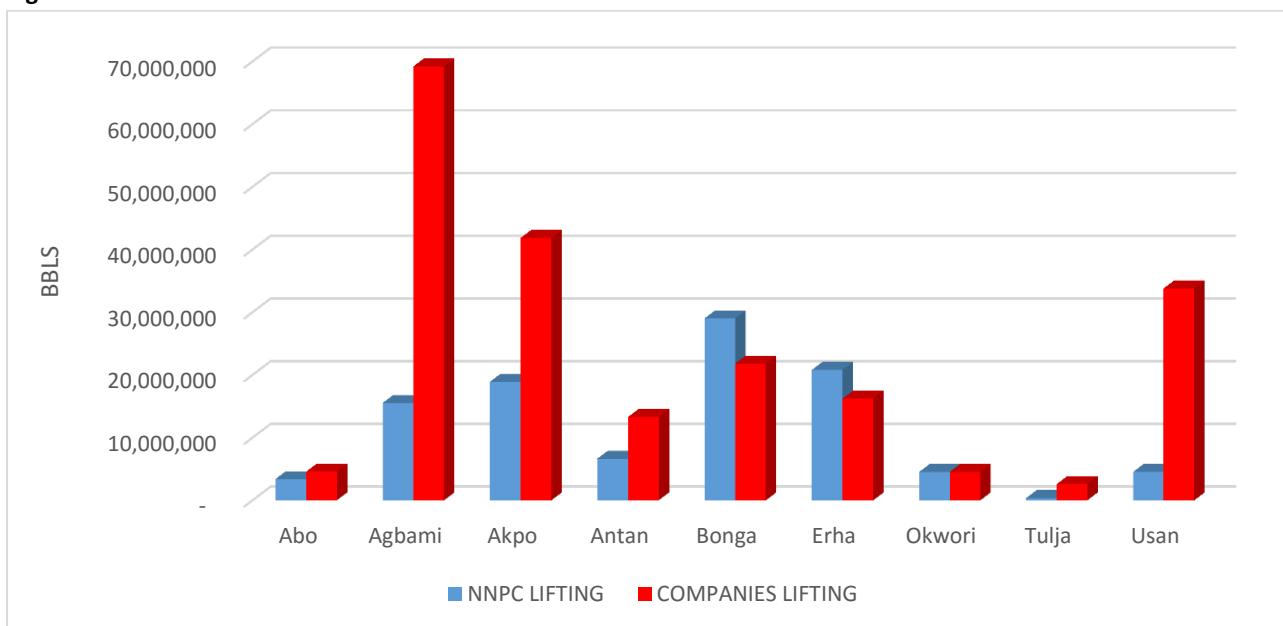


Table 8.2.1.2.1C - Crude Lifting between NNPC and the PSC's Through the PSC's Terminal/FPSO

Company	PRODUCTION (bbls)	NNPC LIFTING (bbls)	NNPC LIFTING %	COMPANIES LIFTING(bbls)	COMPANIES LIFTING %	TOTAL LIFTING (bbls)
Abo	8,022,903	3,394,184	42.3	4,579,331	57.1	7,973,515
Agbami	84,871,128	15,536,126	18.3	69,216,249	81.6	84,752,375
Akpo	60,798,261	18,923,498	31.1	41,863,545	68.9	60,787,043
Antan	19,816,696	6,642,636	33.5	13,294,184	67.1	19,936,820
Bonga	50,947,329	29,032,055	57.0	21,825,974	42.8	50,858,029
Erha	37,634,014	20,813,321	55.3	16,218,381	43.1	37,031,702
Okwori	9,532,752	4,532,227	47.5	4,525,608	47.5	9,057,835
Tulja	2,909,852	365,000	12.5	2,592,822	89.1	2,957,822
Usan	39,214,610	4,539,012	11.6	33,818,649	86.2	38,357,661
Total	313,747,545	103,778,059		207,934,743		311,712,802

Figure 8.2.1.2.1D - Production Entitlement at PSC's Terminals



8.2.2 Definition of Production

The United States Energy Information Administration defines 'Crude Production' as "the volume of oil produced from oil reservoir during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks. (i.e. the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for-net differences between opening and closing lease inventories, basic sediment and water (BS&W)."

Section 63 of the Nigeria Petroleum (Drilling and Production) Regulations 1969 (as amended) defines 'casing-head petroleum spirit' or 'crude oil production' as any liquid hydrocarbon which:

- have been obtained from natural separation or by any chemical or physical process, and
- have not been refined or otherwise treated.

8.2.3 Crude Oil Terminals in Nigeria

The table below shows the various/respective crude oil terminals in Nigeria:

Table 8.2.3 – Crude Oil Terminals in Nigeria

Name	Operator	Location	CAPACITY (Barrels)	CRUDE STREAM
Bonny	SPDC	On-shore	5,580,000	Bonny Light
Forcados	SPDC	On-shore	4,600,000	Forcados blend
Escravos	CNL	On-shore	2,223,730	Escravos Light
Escravos (LPG)	CNL	Off-shore	385,000	Gas
Qua Iboe	MPNU	On-shore	4,200,000/2,000,000	Qua Iboe light/Condensate
BRT	MPNU	On-shore	690,000x2/570,000	C1,C2,C3
Oso	MPNU	On-shore		OSO Condensate
Brass	NAOC	On-shore	3,217,000	Brass blend
Anthan	Addax	Knock Adon (Off-shore)	1,040,000	Anthan blend
Okwori	Addax	Sendje Berge (Off-shore)	1,415,726	Okwor1 crude
Ima	Amni	Alisa Kraig (Off-shore)	1,391,265	Ima condensate
Okoro	Amni	Armada Perkasa(Off-shore)	200,000	Okoro crude
Oloibiri	CNL	Pennington (Off-shore)	1,35,000	
Obe *	Cavendish	Crystal Sea*(Off-shore)	212,067	Obe Crude(Not operational)
Ukpokiti	Express/Sepcol/Atlas	Trinity Spirit (Off-shore)		
Yoho	MPNU	Falcon (Off-shore)	2,00,000	Yoho Crude
Abo	NAE	Gray Warrior (Off-shore)	932,076	Abo Crude

Name	Operator	Location	CAPACITY (Barrels)	CRUDE STREAM
Okono	NPDC/AENR	Mystras (Off-shore)	1,055,000	Okono Crude
EA	SPDC	Sea Eagle (Off-shore)	1,400,000	Sea Eagle Crude
Bonga	SNEPCO	Bonga (Off-shore)	2,000,000	Bonga Crude
Odudu	TEPNG	Unity (Off-shore)	2,418,000	Amenam blend
Akpo	TUPNI	FPSO (Off-shore)	2,000,000	AKPO Condensate
Erha	EEPNL	Erha (Off-shore)	2,220,000	Erha Crude
Agbami	Stardeep	FPSO (Off-shore)	2,200,000	Agbami Crude
Tulja	SEEPCOL	Senge Barge (Off-shore)	2,000,000	Okwuibome Crude
OYO	NAE	Off-shore	1,005,000	OYO Crude
USAN	TEPNG	Off-shore	2,131,639	USAN Crude

NB: Cavendish did not operate within this audit period.

Some of the Companies that operated within this audit period do not have their own terminals. They injected their crude oil to other terminals listed above and export from those terminals. There is usually an agreement for use of the terminals between the terminal owners and the companies. The agreements among other issues dwell on crude oil handling, management of terminal stock and lifting.

8.2.4 Upstream Crude Oil Volumetric Reconciliation

The volumetric reconciliation deals with:

1. Production, terminal balances and stock changes in the terminal.
2. Crude export reconciliation between the volumes lifted as reported by the terminal operator, the companies and DPR records of liftings and
3. Crude oil allocation to the equity participants.

The operators attempt to know how much each well produces by testing each well every month at the flow station. This enables the approximate estimation of quantity of hydrocarbon as a Well may produce. Measurements are taken 8am-8am daily by DPR and 12am-12am daily by the companies at the flow stations in approximation because the meters are not very accurate (a range of $\pm 10\%$).

Table 8.2.4A - All Companies Fiscalised Crude Oil Production Volumes by Operating Arrangement (Bbls)

PRODUCING COMPANIES	CRUDE TYPE	Actual 2013	Production(a) PER DAY	% of Total Production
	BONNY LIGHT	53,702,320	147,130	6.71%
	FORCADOS BLEND	33,301,206	91,236	4.16%
SHELL	FB(Condensates)	-	-	0.00%
	BRASS BLEND	1,586,917	4,348	0.20%
	EA (af)	15,626,908	42,813	1.95%
Sub-Total		104,217,351	285,527	13.02%
	ESC	50,826,197	139,250	6.35%
	BONNY LIGHT	2,236,558	6,128	0.28%
CHEVRON	BRASS BLEND	1,019,077	2,792	0.13%
	FORCADOS BLEND	-	-	0.00%
	ESC(af)	23,402,752	64,117	2.92%
Sub-Total		54,081,832	148,169	6.76%
AGIP	BRASS BLEND	19,249,544	52,738	2.40%
	FORCADOS BLEND	394,836	1,082	0.05%
Sub-Total		19,644,380	53,820	2.45%
MOBIL	QUA IBOE LIGHT	56,711,372	155,374	7.08%
	OSO CONDENSATES	1,424,471	3,903	0.18%
	OSO(MCA)	4,014,400	10,998	0.50%
	QIL(PIP-af)	12,762,000	7,287,600	1.59%
	QIL(MCA)	45,394,800	27,236,880	5.67%
	QIL(S-af)	10,712,895	6,419,729	1.34%
	YOHO	25,140,826	68,879	3.14%
Sub-Total		83,276,669	228,155	10.40%
TEPNG	FORCADOS BLEND	-	-	0.00%
	BONNY LIGHT	7,841,779	21,484	0.98%
	<i>EKANGA/ZAFIRO</i>	4,029,844	11,041	0.50%
	AMENAM BLEND	15,987,558	43,802	2.00%
	AMENAM BLEND(af)	13,602,147	37,266	1.70%

PRODUCING COMPANIES	CRUDE TYPE	Actual 2013	Production(a) PER DAY	% of Total Production
Sub-Total		23,829,337	65,286	2.98%
CHEVRON	PENNINGTON LIGHT	2,638,917	7,230	0.33%
PAN OCEAN	FORCADOS BLEND	1,834,469	5,026	0.23%
TOTAL: (JV)		289,522,955	793,214	36.17%
TOTAL: (AF-JV)		109,888,994	301,066	13.73%
TOTAL: (JV & AF-JV)		399,411,949	1,094,279	49.90%
NIG. AGIP EXPL(NAE)	ABO (psc)	8,022,903	21,981	1.00%
CHEVRON	AGBAMI (psc)	84,871,128	232,524	10.60%
TUPNI	AKPO Condesate (psc)	60,798,261	166,571	7.60%
SNEPCO	BONGA(psc)	50,947,329	139,582	6.36%
ESSO EXP&PRO NIG LTD	ERHA(psc)	37,634,014	103,107	4.70%
ADDAX	BRASS BLEND(psc)	1,347,172	3,691	0.17%
	ANTAN BLEND(psc)	18,656,969	51,115	2.33%
	OKWB(psc)	9,532,752	26,117	1.19%
Sub-Total		29,536,893	80,923	3.69%
SEEPCO	OKWUIBOME (psc)	2,909,852	7,972	0.36%
TEPNG	USAN (psc)	39,214,610	107,437	4.90%
AGIP ENERGY	BB(sc)	3,204,453	8,779	0.40%
Total: PSC & SC		317,139,443	868,875	39.62%
NPDC/AGIP ENERGY	OKONO (NPDC)	14,917,919	40,871	1.86%
	OKONO (AENR)	LIFTING FIGURE ONLY		
NPDC/SEPLAT	FB(NPDC)	9,800,019	26,849	1.22%
	FB(SEPLAT)	7,901,562	21,648	0.99%
NPDC/FIRST HYDROCARBON	FB (NPDC)	407,611	1,117	0.05%
	FB (FHC)	333,500	914	0.04%
NPDC/NECONDE	FB (NPDC)	1,694,294	4,642	0.21%

PRODUCING COMPANIES	CRUDE TYPE	Actual 2013	Production(a) PER DAY	% of Total Production
	FB (NECONDE)	1,386,240	3,798	0.17%
NPDC/SHORELINE	FB (NPDC)	3,862,111	10,581	0.48%
	FB (SHORELINE)	3,159,909	8,657	0.39%
NPDC/ND WESTERN	FB (NPDC)	2,293,733	6,284	0.29%
	FB (ND WESTERN)	1,876,692	5,142	0.23%
NPDC	FORCADOS BLEND	2,182,331	5,979	0.27%
Sub-Total		49,815,921	136,482	6.22%
CONSOLIDATED OIL	ESC	510,238	1,398	0.06%
MONI PULO LTD.	ANTAN BLEND	1,159,727	3,177	0.14%
DUBRI	ESCRAVOS	109,464	300	0.01%
AMNI	IMA	260,051	712	0.03%
	OKORO	6,624,751	18,150	0.83%
ATLAS	UKPOKITI	423,789	1,161	0.05%
EXPRESS PETROLEUM	UKPOKITI	163,116	447	0.02%
CONTINENTAL OIL	PENNINGTON LIGHT	4,719,545	12,930	0.59%
CAVENDISH PETROLEUM	OBE	-	-	0.00%
NIG AGIP EXPL/ALLIED/CAM AC	OYO BLEND	803,229	2,201	0.10%
Total: INDEPENDENT		64,589,831	176,958	8.07%
NIGER DELTA PET. RES. LTD	BONNY LIGHT	328,968	901	0.04%
PLATFORM PETROLEUM LTD	BRASS BLEND	602,463	1,651	0.08%
MIDWESTERN OIL & GAS	BRASS BLEND	2,978,992	8,162	0.37%
WALTER SMITH PET OIL LTD	BONNY LIGHT	901,640	2,470	0.11%

PRODUCING COMPANIES	CRUDE TYPE	Actual 2013	Production(a) PER DAY	% of Total Production
PILLAR OIL	BRASS BLEND	534,290	1,464	0.07%
ENERGIA LTD	BRASS BLEND	724,873	1,986	0.09%
BRITTANIA U	ESC	326,884	896	0.04%
ORIENTAL ENERGY	EBOK	12,948,763	35,476	1.62%
PRIME E & P	ASARAMATORU	-	-	0.00%
Total: MARGINAL FIELDS		19,346,873	53,005	2.42%
GRAND-TOTAL (b - Production Figures Excludes EKANGA/ZAFIRO)		800,488,096	2,193,118	100.00%

Source: NNPC-COMD

Note: Ekanga/Zafiro production is not included in the Total Production Volume.

Table 8.2.4B - Crude Stream Analysis for 2013

PRODUCING COMPANIES	CRUDE TYPE ANNUAL TOTAL	Actual 2013 (BBLS)	Production(a) PER DAY (BBLS)	% OF TOTAL PRODUCTIO N
NIG. AGIP EXPL	ABO	8,022,903	21,981	1.00
CHEVRON	AGBAMI	84,871,128	232,524	10.55
SAPETRO/TOTAL UPSTREAM NIGERIA	AKPO	60,798,261	166,571	7.56
TEPNG	AMENAM BLEND	29,589,705	81,068	3.68
ADDAX & MONI PULO	ANTAN BLEND	19,816,696	54,292	2.46
PRIME ENERGY	ASARAMATORU	-		
SPDC,CHEVRON,NAOC,ADDAX,AENR, PPL,MOGC,POL,&EL	BRASS BLEND	31,247,781	85,610	3.88
SPDC, CHEVRON, ELF, NIGER DELTA & WSPOL	BONNY LIGHT	65,011,265	178,113	8.08
SNEPCO	BONGA	50,947,329	139,582	6.33

PRODUCING COMPANIES	CRUDE TYPE ANNUAL TOTAL	Actual 2013 (BBLS)	Production(a) PER DAY (BBLS)	% OF TOTAL PRODUCTIO N
SPDC	EA	15,626,908	42,813	1.94
ORIENTAL ENERGY	EBOK	12,948,763	35,476	1.61
TOTAL	EKANGA/ZAFIRO	4,029,844	11,041	0.50
MOBIL	ERHA	37,634,014	103,107	4.68
CHEVRON, CONOIL & DUBRI	ESCRAVOS	75,175,535	205,960	9.34
SPDC,CHEVRON,NAOC,ELF,PAN OCEAN&NPDC	FORCADOS	70,428,513	192,955	8.75
AMNI	IMA COND.	260,051	712	0.03
CAVENDISH PETROLEUM	OBE	-	-	-
NPDC/AENR	OKONO	14,917,919	40,871	1.85
AMNI	OKORO	6,624,751	18,150	0.82
ADDAX	OKWORI	9,532,752	26,117	1.18
SEEPCO	OKWUIBOME	2,909,852	7,972	0.36
MOBIL	OSO	5,438,871	14,901	0.68
NIG AGIP EXPL/ALLIED/CAMAC	OYO	803,229	2,201	0.10
CHEVRON, CONTINENTAL & MOVIDO E&P	PENN. LIGHT	7,358,462	20,160	0.91
MOBIL	QUA IBOE	125,581,067	344,058	15.61
ATLAS & EXPRESS	UKPOKITI	586,905	1,608	0.07
TEPNG	USAN			

PRODUCING COMPANIES	CRUDE TYPE ANNUAL TOTAL	Actual 2013 (BBLS)	Production(a) PER DAY (BBLS)	% OF TOTAL PRODUCTIO N
		39,214,610	107,437	4.87
MOBIL	YOHO	25,140,826	68,879	3.12
TOTAL (including Ekanga/Zafiro)		804,517,940	2,204,159	100.00

Source: NNPC-COMD

Note: Ekanga/Zafiro production is included in the Total Production Volume.

Table 8.2.4C - All Companies Fiscalised Crude Oil Production by Month

MONTH	CRUDE OIL & CONDENSATES	
	PRODUCTION	
	Barrels/Month	Barrels/Day(a)
JANUARY	75,303,447	2,429,143
FEBRUARY	62,358,212	2,227,079
MARCH	68,559,165	2,211,586
APRIL	66,816,918	2,227,231
MAY	64,014,595	2,064,987
JUNE	60,563,907	2,018,797
JULY	68,067,376	2,195,722
AUGUST	71,123,086	2,294,293
SEPTEMBER	66,519,862	2,217,329
OCTOBER	69,083,768	2,228,509
NOVEMBER	62,647,642	2,088,255
DECEMBER	65,430,118	2,181,004
TOTAL	800,488,096	

From above tables, total fiscalised Crude Oil production for the year 2013 was 800,488,096 bbls with a daily average of 2,181,004 bbls excluding production from the unitized fields (Ekanga/Zafiro).

8.3 Crude Oil Mass Balance Reconciliation

8.3.1 Crude Oil Production and Lifting Data

The total Crude Oil Production and lifting volumes by NNPC and the Oil companies for the period 2013 is summarised below:

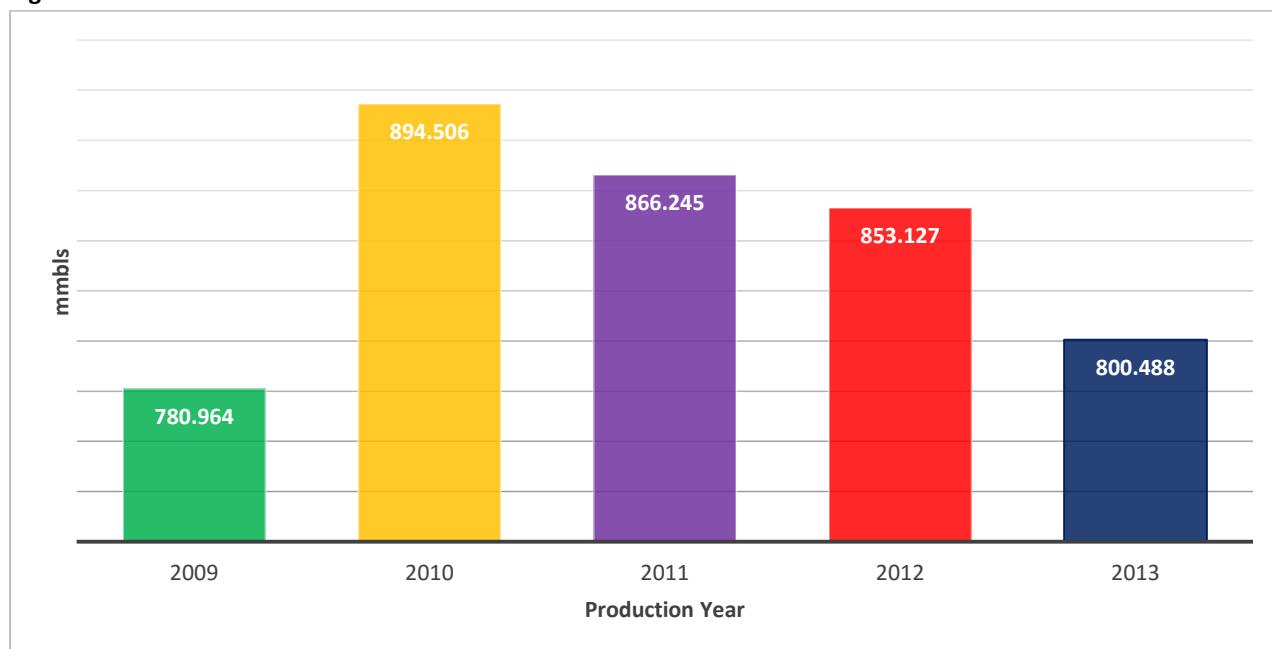
Table 8.3.1 - Total Crude Oil Production and Liftings from 2009-2013

PRODUCTION	2009	2010	2011	2012	2013
	mmbbls	mmbbls	mmbbls	mmbbls	mmbbls
Total production	780.964	894.506	866.245	853.127	800.488
Total opening stock	18.841	13.972	14.637	15.314	12.495
Zafiro Crude ^[1]	4.752	4.785	3.759	4.131	4.030
Total stock for liftings	804.557	913.263	884.641	868.091	817.007
Terminal adjustment/shrinkage ^[2]	-1.358	-0.33	-0.247	-0.728	-0.381
Available total Terminal stock	803.199	912.933	884.394	867.363	816.626
LIFTING					
Federation Export:					
Joint Venture Operators (JV)	101.373	131.376	133.444	101.733	159.210
Production Sharing contractors (PSCs)	71.886	87.748	86.343	115.081	104.224
Service Contractors (SCs)	0.988	1.985	1.696	1.47	2.649
Sub -Total Federation Export	174.247	221.109	221.483	218.284	266.083
PPMC Domestic Crude Supply(Refining / Sales)					
Joint Venture Operator (JVs)	153.661	164.872	163.457	161.208	74.684
Production Sharing Contractors	7.368	1.271	0.997	0.975	0
Service Contractors (SCs)	0.885	0.38	0	0.16	0
PPMC Domestic Crude Supply(Refining / Sales)	161.914	166.523	164.454	162.343	74.684
Sub-Total: Federation +PPMC Lifting	336.161	387.632	385.937	380.627	340.767
Other Operators:					
JV Operators	218.35	235.833	228.375	209.552	167.466
Production Sharing Contractors PSCs	189.152	228.817	198.194	205.382	207.385
Service Contractors (SCs)	1.206	0.92	0.868	2.445	0.998
Sole Risk	40.785	40.76	46.655	50.778	65.667
Marginal Fields	4.057	4.286	7.258	17.868	18.054
Sub-Total: Other Operators	453.549	510.616	481.35	486.025	459.57
Total Lifting	789.71	898.248	867.287	866.652	800.337
Balance closing stock	13.489	14.685	17.107	0.711	16.974

^[1] Ekanga/Zafiro crude represents the production from the unitized zone operated by Nigeria and Mobil Equatorial Guinea which is not included in the Operating Companies' production in Nigeria, but has been included in the total lifting by the Operators and NNPC.

^[2] Shrinkages or Terminal adjustments represent losses due to evaporation and drainage of the crude in the terminals during the process of removing water and sediments in the period that the crude stayed in the tanks before export.

Figure 8.3.1 - Total Crude Production 2009 – 2013



Production dropped from **853.127 million bbls** in 2012 to **800.488 million bbls** in 2013. The difference of **52.639 million bbls** reflects a decline of **6.17%** in 2013.

In 2013, the federation export volumes was **181.953 million bbls** as compared to **218.284 million bbls** in 2012 which reflects a decrease of **16.64%**.

8.3.1.1 Crude Oil Production by Operating Arrangements

The total production of crude oil obtained from COSM-COMD records in 2013 is as shown below:

Table 8.3.1.1 - Crude Oil Production by Operating Arrangements

Total production	2009 ('000 bbls)	2010 ('000 bbls)	2011 ('000 bbls)	2012 ('000 bbls)	2013 ('000 bbls)
Joint Ventures (JVs)	463,668	529,166	521,517	465,329	399,412
Production Sharing Contracts (PSCs)	268,792	316,887	289,334	320,434	313,935
Service Contracts (SCs)	3,237	2,711	2,802	3,056	3,205
Sole Risk (SR)	41,389	41,938	44,511	46,246	64,589
Marginal Fields	3,878	3,804	8,081	18,061	19,347
TOTAL	780,964	894,506	866,245	853,126	800,488

Figure 8.3.1.1A - Crude Oil Production by Operating Arrangements

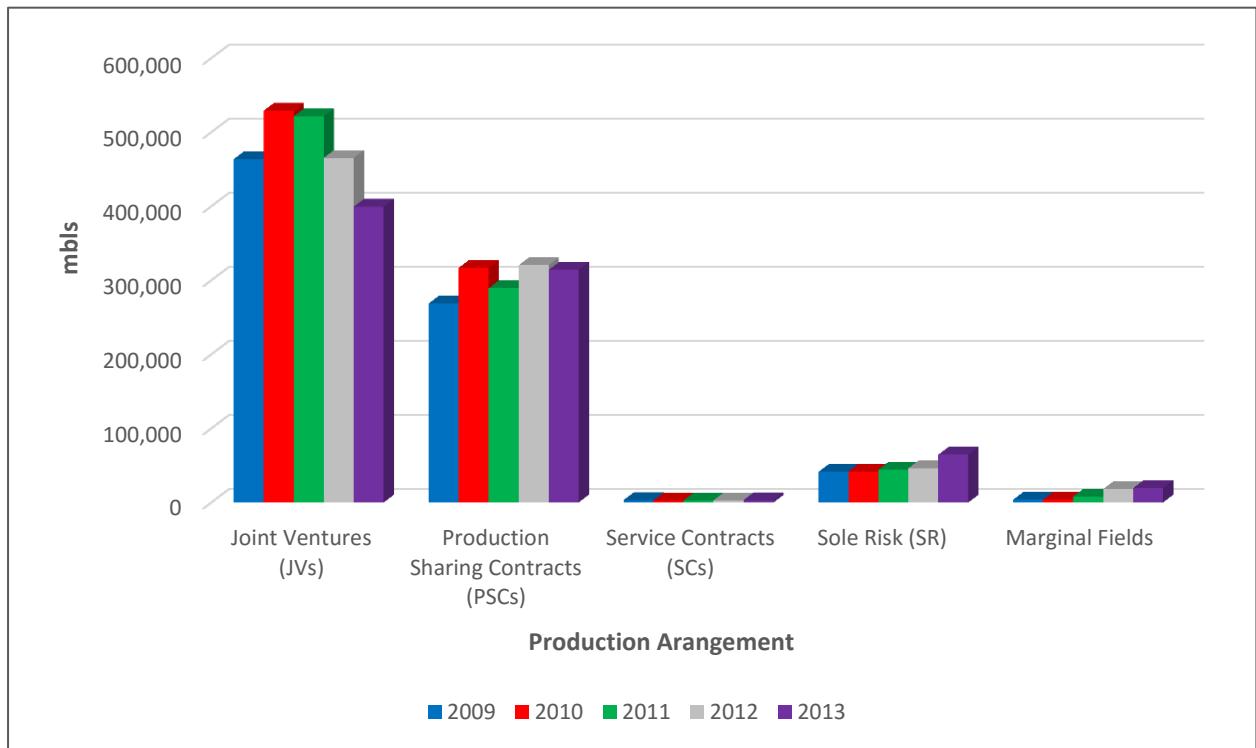
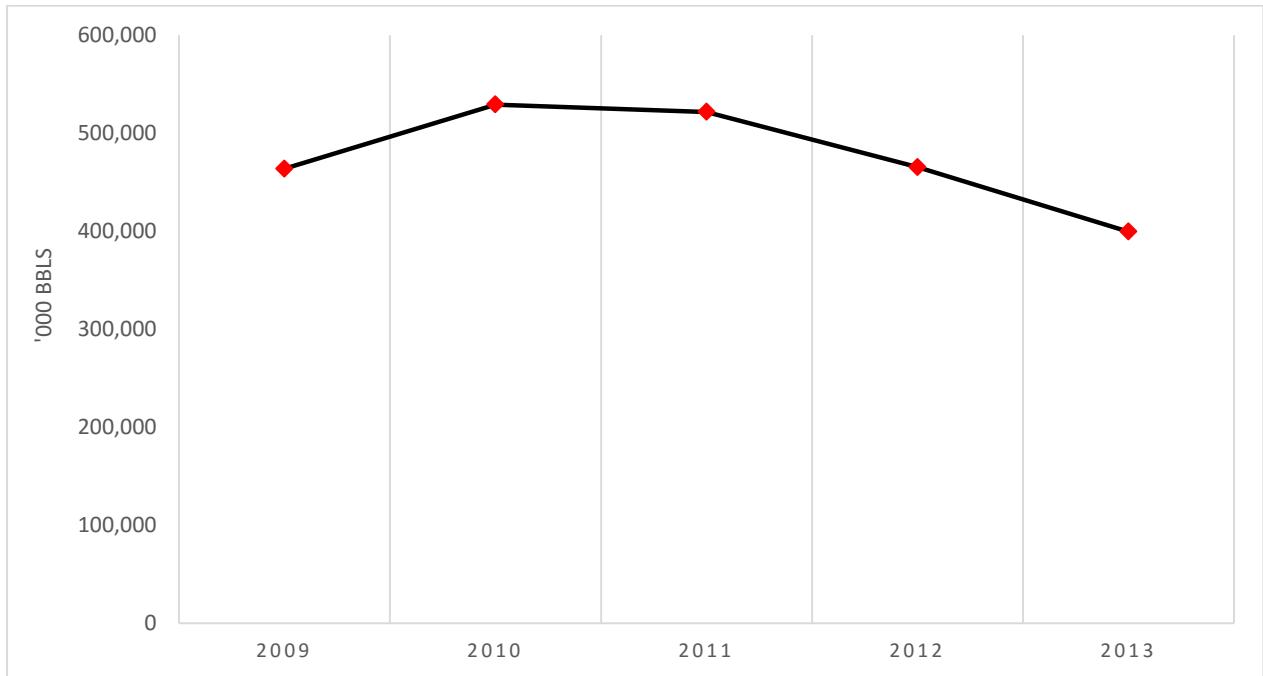
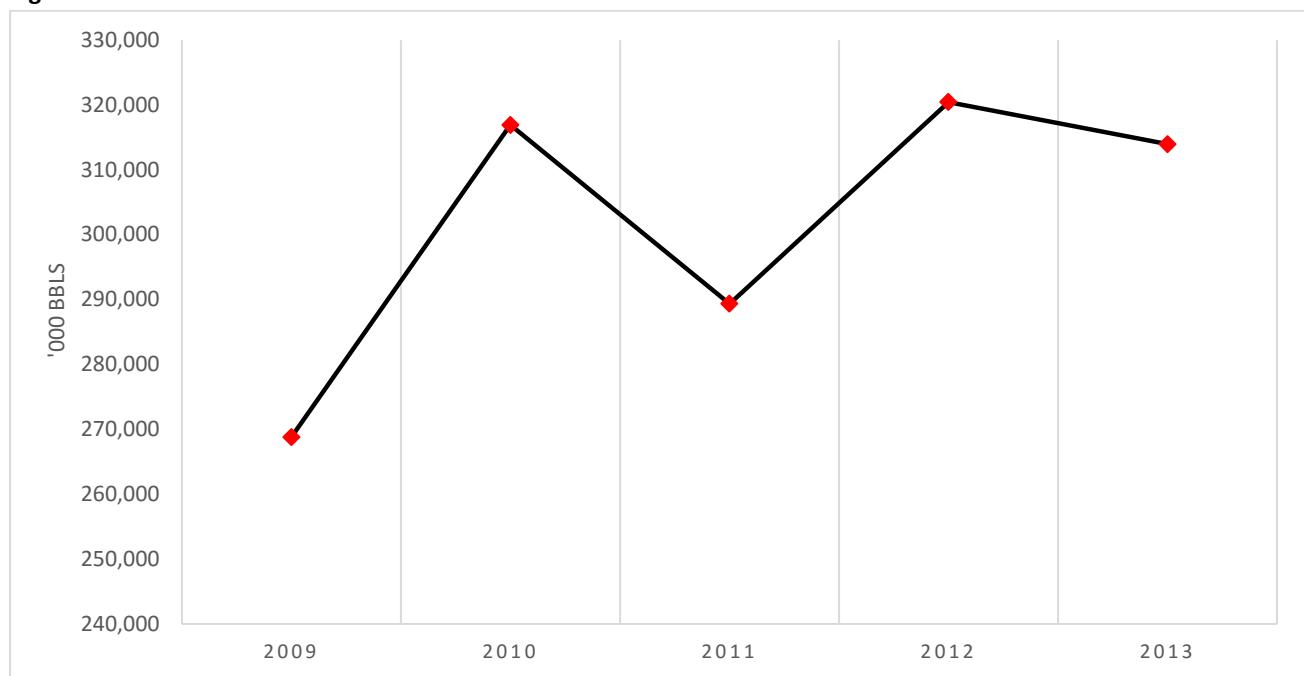


Figure 8.3.1.1B – 2013 JV Production



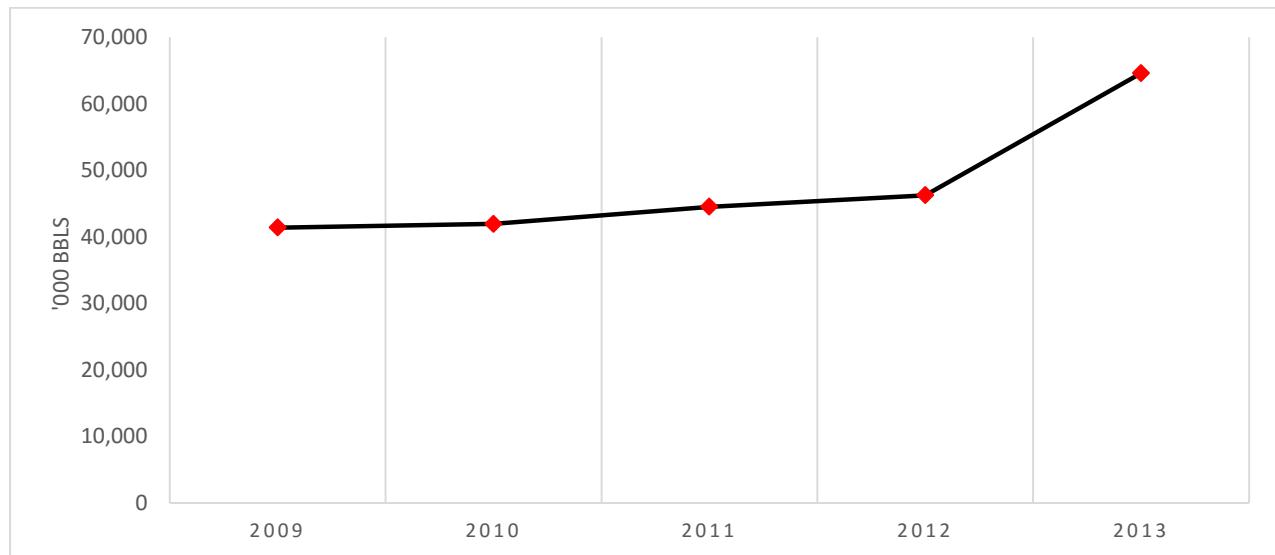
Joint Venture (JV) production declined from 465.329 million bbls in 2012 to 399.412 million bbls in 2013. This shows a 14.166% production decline of 65.917 million bbls.

Figure 8.3.1.1C – 2013 PSC Production



Production Sharing Contract (PSC) production decreased from 320.434 million bbls in 2012 to 313.945 million bbls in 2013 reflecting a 2.025% decline.

Figure 8.3.1.1D – 2013 Sole Risk Production



Sole Risk production volumes increased significantly from 46.246 million bbls in 2012 to 64.589 million bbls in 2013 showing an appreciation of 39.664%.

Marginal fields' production volumes increased from 18.061 million bbls in 2012 to 19.347 million bbls in 2013. This increase of 7.120% is impressive as it builds on the 7.9.17% increase of 2012 volume. This shows increased participation in the upstream operations by indigenous firms.

8.3.1.2 Crude Oil Lifting by Operating Arrangements

The volume of crude oil lifting by operating arrangements is shown in the table below:

Table 8.3.1.2A Total Crude Oil Lifting by Operating Arrangements

Total Lifting	2009 ('000 bbls)	2010 ('000 bbls)	2011 ('000 bbls)	2012 ('000 bbls)	2013 ('000 bbls)
NNPC Lifting	336,161	387,632	385,937	380,621	340,767
Other JV Operators	218,350	235,833	228,375	209,552	167,466
Production Sharing Contract (PSC)	189,152	228,817	198,194	205,382	207,385
Service Contracts	1,206	920	868	2,445	998
Sole risk (Independent Operators)	40,785	40,760	46,655	50,778	65,667
Marginal field	4,057	4,286	7,258	17,868	18,054
Grand Total	789,710	898,248	867,287	866,646	800,337

Source: NNPC-COMD

Figure 8.3.1.2A - Crude Oil Lifting by Operating Arrangements

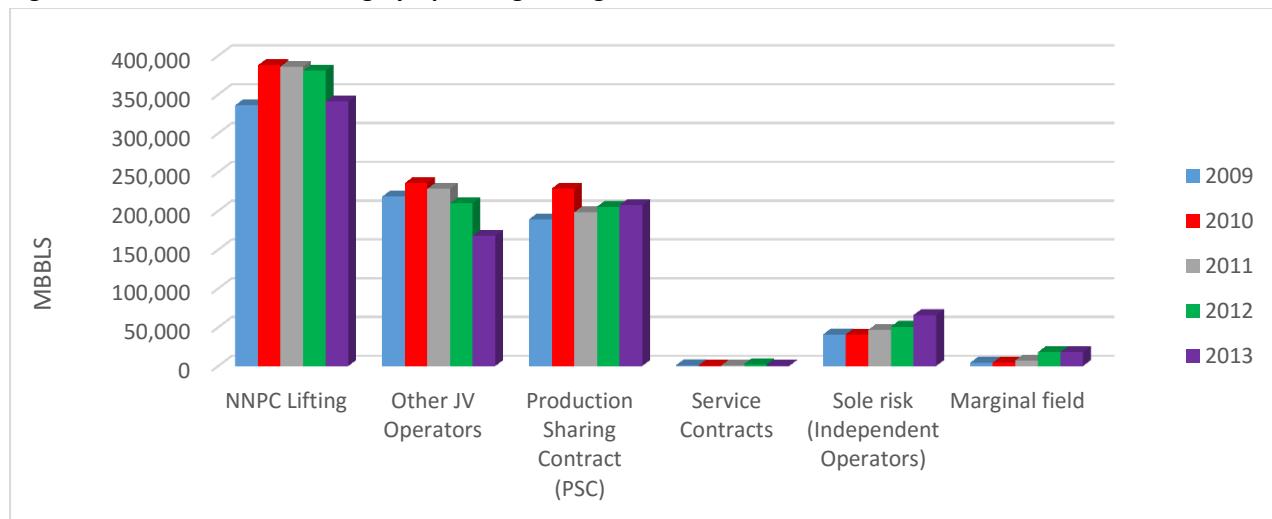
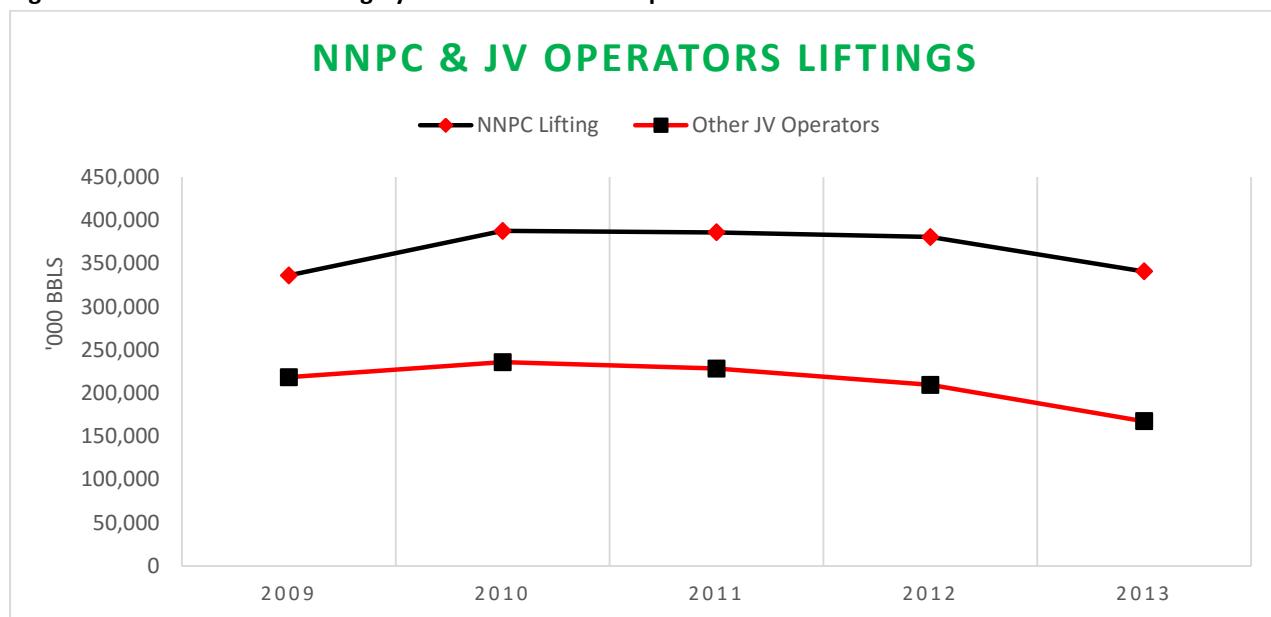


Figure 8.3.1.2B - Crude Oil Lifting By NNPC and Other JV Operators



- NNPC and JV Operators' liftings declined in 2013 by 10.471% and 20.074% respectively when compared to 2012 which corresponds with the overall drop in production volumes.

Table 8.3.1.2B – Month by Month Lifting during the Year for all Production Arrangements

MONTH	TOTAL	JOINT VENTURE (JV)		AF (CARRY)		PSC	SERVICE CONTRACT (SC)		INDEPENDENT	MARGINAL FIELDS
		LIFTINGS	NNPC	COMPANIES	NNPC		NNPC	COMPANIES		
JANUARY	73,888,274	21,959,248	10,441,901	5,373,546	4,302,022	10,352,197	15,292,896	180,000	-	5,304,408
FEBRUARY	57,424,103	11,758,450	10,737,431	2,729,100	1,254,400	6,717,188	17,164,427	360,000	-	5,352,757
MARCH	74,074,301	17,923,280	10,592,842	4,499,850	3,500,844	10,898,229	19,256,256	-	-	5,366,044
APRIL	66,640,159	12,272,593	12,936,547	4,495,306	2,363,898	9,474,729	18,045,189	257,850	248,300	5,732,939
MAY	62,822,255	14,231,240	8,750,644	5,644,730	3,103,869	10,148,059	15,423,956	-	130,000	3,334,075
JUNE	59,988,886	16,335,316	9,177,368	3,818,461	1,865,700	7,439,691	14,190,276	690,000	21,000	5,026,039
JULY	68,844,263	15,575,433	9,790,792	4,425,460	4,427,889	8,955,586	20,093,585	-	199,000	4,760,828
AUGUST	71,146,909	9,584,361	12,910,175	6,832,296	3,984,081	9,396,297	18,312,098	293,000	-	8,032,035
SEPTEMBER	67,624,749	12,162,164	10,703,928	5,949,388	3,515,431	8,930,058	17,587,950	130,000	160,000	6,061,880
OCTOBER	66,149,019	12,824,202	8,193,483	7,625,207	4,404,255	6,405,108	20,145,391	320,588	70,000	4,834,735
NOVEMBER	65,368,775	11,612,231	10,817,450	6,364,404	3,513,692	8,584,070	15,945,314	206,207	80,000	6,321,393
DECEMBER	66,365,513	14,971,977	12,892,874	4,926,061	3,284,041	6,922,405	15,928,011	211,562	90,000	5,540,091
TOTAL	800,337,206	171,210,495	127,945,435	62,683,808	39,520,121	104,223,617	207,385,349	2,649,207	998,300	65,667,224
THE YEAR DURING TRIAL MARKETING PERIOD (TMP):						-				
BY NNPC FOR FEDERATION ACCOUNT DURING THE YEAR:						104,223,617				
(NRIES AND FEDERATION ACCOUNT) DURING THE YEAR:						340,767,127				

Source: NNPC-COMD

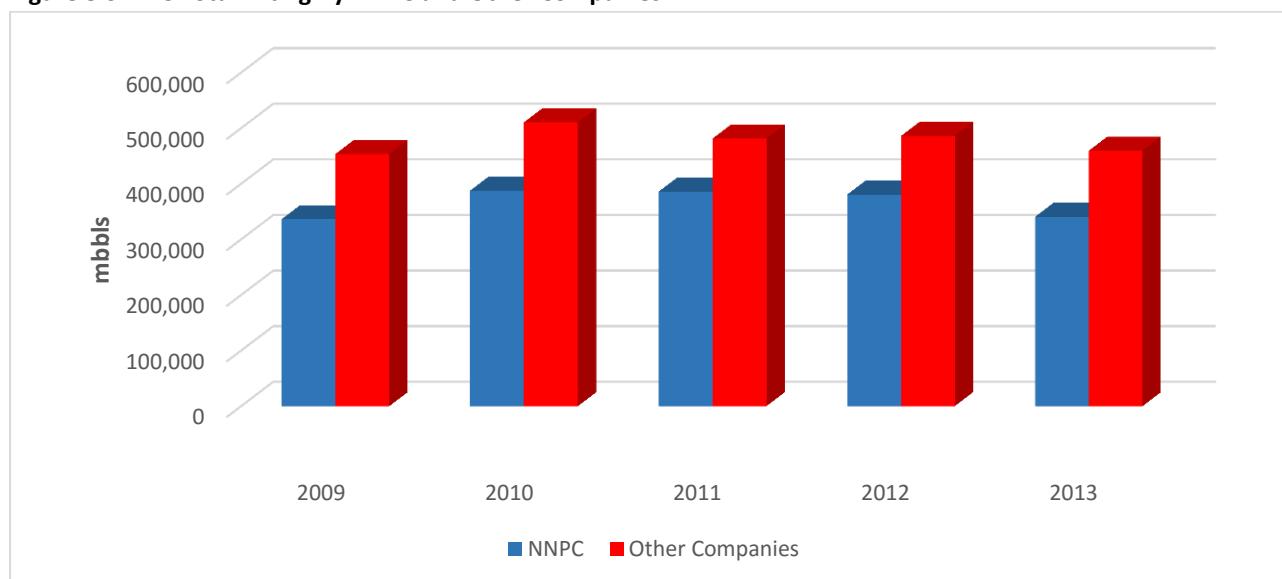
Total Lifting of Crude Oil by NNPC and other Companies

The percentage lifting between NNPC and other Companies is shown in table 8.3.1.2c below.

Table 8.3.1.2C - Total Lifting of Crude Oil by NNPC and Other Companies

Total Liftings	2009	% of Lifting	2010	% of Lifting	2011	% of Lifting	2012	% of Lifting	2013	% of Lifting
NNPC	336,161	42.57%	387,632	43.15%	385,937	44.50%	380,621	43.92%	340,767	42.58%
Other Companies	453,549	57.43%	510,616	56.85%	481,350	55.50%	486,025	56.08%	459,570	57.42%
TOTAL	789,710	100%	898,248	100%	867,287	100%	866,646	100%	800,337	100%

Figure 8.3.1.2C Total Lifting By NNPC and Other Companies



Total crude oil liftings by NNPC and the companies dropped by 39.854 million bbls (10.471%) and 26.455 million bbls (05.443%) respectively or a drop of 66.309million bbls(7.651%). This is as a result of the drop in production when compared to 2012.

8.4 Disaggregated Oil Flows

8.4.1 Comparison of Crude Oil Production between Companies and DPR

Table below shows the comparison between the volumes of crude oil produced by stream as reported by the companies, NNPC and DPR in 2013.

Table 8.4.1A – Comparison of Fiscalised Crude Production by Stream

STREAM	NNPC	DPR	COMPANY
ABO	8,022,903	8,022,897	8,022,903
AGBAMI	84,871,128	84,871,128	84,871,128
AKPO	60,798,261	61,012,205	61,022,217
AMENAM	29,589,705	29,478,222	29,478,229
ANTAN	19,816,696	19,816,696	19,816,696
BONGA	50,947,329	50,904,162	50,904,162
BONNY	65,011,265	64,667,075	64,808,268
BRASS	31,247,781	31,339,249	31,339,246
EA	15,626,908	15,626,909	15,626,908
EBOK	12,948,763	12,948,763	12,948,763
ERHA	37,634,014	37,657,596	37,657,595
ESCRAVOS	75,175,535	75,172,726	75,172,726
FORCADOS	70,428,513	71,000,792	70,886,944
IMA	260,051	260,051	260,051
OKORO	6,624,751	6,584,898	6,584,898
OKONO	14,917,919	14,904,197	14,886,967
OKWORI	9,532,752	9,532,779	9,532,752
OYO	803,229	812,467	812,467
PENNINGTON	7,358,462	7,357,435	7,229,801
QIT	131,019,938	130,674,938	130,674,970
TULJA	2,909,852	3,204,478	3,104,832
UKPOKITI	586,905	982,136	982,136
USAN	39,214,610	39,191,544	39,184,610
YOHO	25,140,826	25,140,803	25,140,826
TOTAL	800,488,096	801,164,146	800,950,095
ZAFIRO	4,029,844	4,104,610	4,104,610

Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance Templates

Figure 8.4.1A - Comparison of Fiscalised Crude Production by Stream

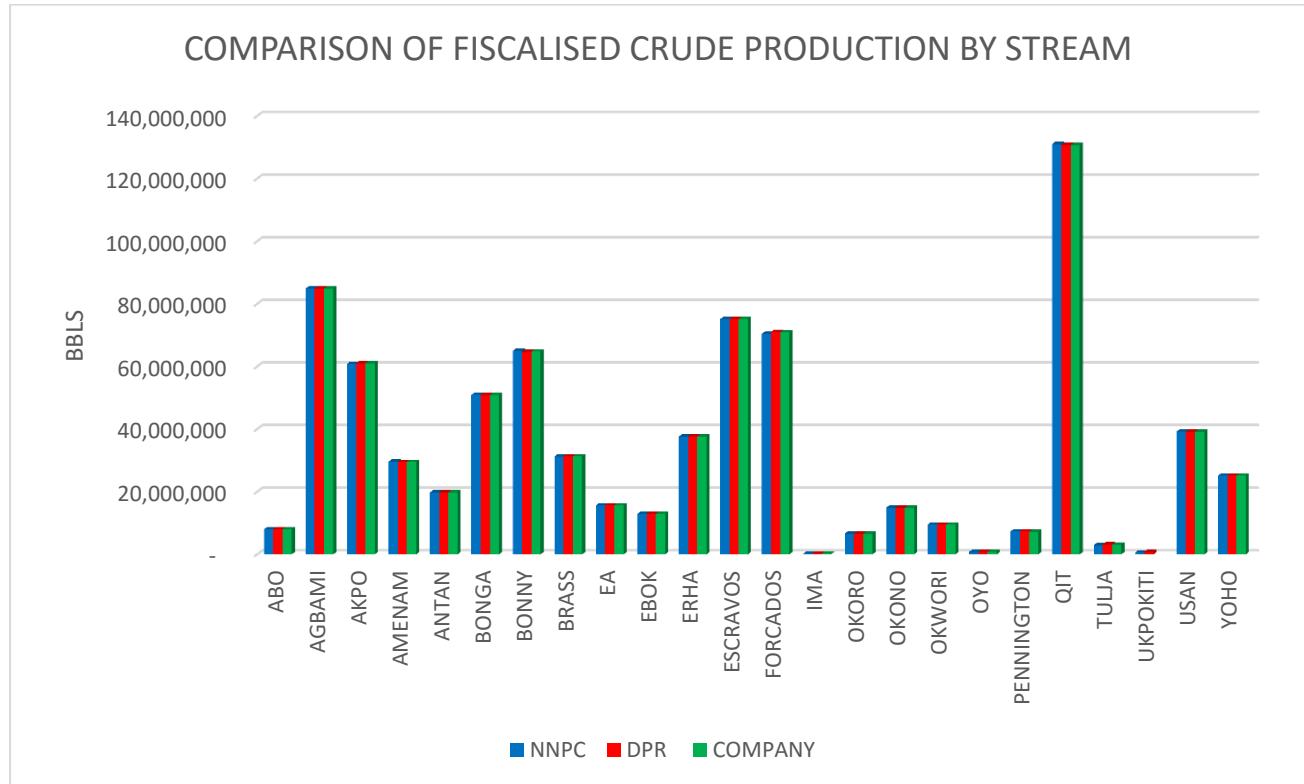


Table 8.4.1B - Comparison of Production between NNPC and DPR

STREAM	NNPC	DPR	VARIANCE
ABO	8,022,903	8,022,897	6
AGBAMI	84,871,128	84,871,128	-
AKPO	60,798,261	61,012,205	(213,944)
AMENAM	29,589,705	29,478,222	111,483
ANTAN	19,816,696	19,816,696	-
BONGA	50,947,329	50,904,162	43,167
BONNY	65,011,265	64,667,075	344,190
BRASS	31,247,781	31,339,249	(91,468)
EA	15,626,908	15,626,909	(1)
EBOK	12,948,763	12,948,763	-
ERHA	37,634,014	37,657,596	(23,582)
ESCRAVOS	75,175,535	75,172,726	2,809
FORCADOS	70,428,513	71,000,792	(572,279)
IMA	260,051	260,051	-
OKORO	6,624,751	6,584,898	39,853
OKONO	14,917,919	14,904,197	13,722
OKWORI	9,532,752	9,532,779	(27)
OYO	803,229	812,467	(9,238)

STREAM	NNPC	DPR	VARIANCE
PENNINGTON	7,358,462	7,357,435	1,027
QIT	131,019,938	130,674,938	345,000
TULJA	2,909,852	3,204,478	(294,626)
UKPOKITI	586,905	982,136	(395,231)
USAN	39,214,610	39,191,544	23,066
YOHO	25,140,826	25,140,803	23
TOTAL	800,488,096	801,164,146	(676,050)
ZAFIRO	4,029,844	4,104,610	(74,766)

Table 8.4.1C - Comparison of Production between DPR and Companies

STREAM	DPR	COMPANY	VARIANCE
ABO	8,022,897	8,022,903	(6)
AGBAMI	84,871,128	84,871,128	-
AKPO	61,012,205	61,022,217	(10,012)
AMENAM	29,478,222	29,478,229	(7)
ANTAN	19,816,696	19,816,696	-
BONGA	50,904,162	50,904,162	-
BONNY	64,667,075	64,808,268	(141,193)
BRASS	31,339,249	31,339,246	3
EA	15,626,909	15,626,908	1
EBOK	12,948,763	12,948,763	-
ERHA	37,657,596	37,657,595	1
ESCRAVOS	75,172,726	75,172,726	-
FORCADOS	71,000,792	70,886,944	113,848
IMA	260,051	260,051	-
OKORO	6,584,898	6,584,898	-
OKONO	14,904,197	14,886,967	17,230
OKWORI	9,532,779	9,532,752	27
OYO	812,467	812,467	-
PENNINGTON	7,357,435	7,229,801	127,634
QIT	130,674,938	130,674,970	(32)
TULJA	3,204,478	3,104,832	99,646
UKPOKITI	982,136	982,136	-
USAN	39,191,544	39,184,610	6,934
YOHO	25,140,803	25,140,826	(23)
TOTAL	801,164,146	800,950,095	214,051
ZAFIRO	4,104,610	4,104,610	-

The Total production volume for the Companies is not inclusive of Sheba Ukpokiti Crude stream as they did not provide volumetric data, this however has no material effect as to the overall production volume for the year under review.

Table 8.4.1D - Comparison between Liftings Reported by Terminal Operators, DPR, NNPC and Companies

STREAM	NNPC	DPR	COMPANY	TERMINAL OPERATOR
ABO	7,973,513	7,973,515	7,973,515	7,973,515
AGBAMI	84,752,375	84,752,375	84,752,375	84,752,375
AKPO	60,787,043	60,787,043	60,787,043	60,787,043
ASARAMATORU	169,756	-	-	-
AMENAM	28,080,832	28,080,832	27,740,518	28,080,832
ANTAN	19,936,820	19,936,820	19,936,820	19,936,820
BONGA	50,858,029	50,858,029	50,858,029	50,858,029
BONNY	65,147,741	65,147,741	65,147,741	65,147,741
BRASS	30,866,918	30,866,918	30,866,918	30,866,918
EA	16,175,525	16,175,525	16,175,525	16,175,525
EBOK	13,118,644	13,118,643	13,118,643	13,118,643
ERHA	37,031,702	37,031,702	37,031,702	37,031,702
ESCRAVOS	75,041,673	75,041,673	75,041,673	75,041,673
FORCADOS	70,710,265	71,470,045	70,710,265	70,710,265
IMA	209,822	209,822	209,822	209,822
OKORO	6,431,941	6,431,941	6,431,941	6,431,941
OKONO	14,831,223	14,831,286	14,831,286	14,831,286
OKWORI	9,057,835	9,057,835	9,057,835	9,057,835
OYO	671,221	671,221	671,221	671,221
PENNINGTON	6,891,180	6,891,180	7,359,788	6,891,180
QIT	130,387,983	130,387,983	130,387,983	130,387,981
TULJA	2,957,822	2,957,822	2,957,822	2,957,822
UKPOKITI	982,136	982,136	982,136	684,686
USAN	38,357,661	38,357,661	38,357,661	38,357,661
YOHO	24,969,999	24,969,999	24,969,999	24,969,999
TOTAL	796,399,659	796,989,747	796,358,261	795,932,515
ZAFIRO	3,937,545	3,937,545	3,937,545	3,937,545

Source: COMD/DPR 2013 Crude Oil Production Profile, Companies Terminal Balance and Terminal Operations

Figure 8.4.1D – Comparison of Crude Lifting by Stream

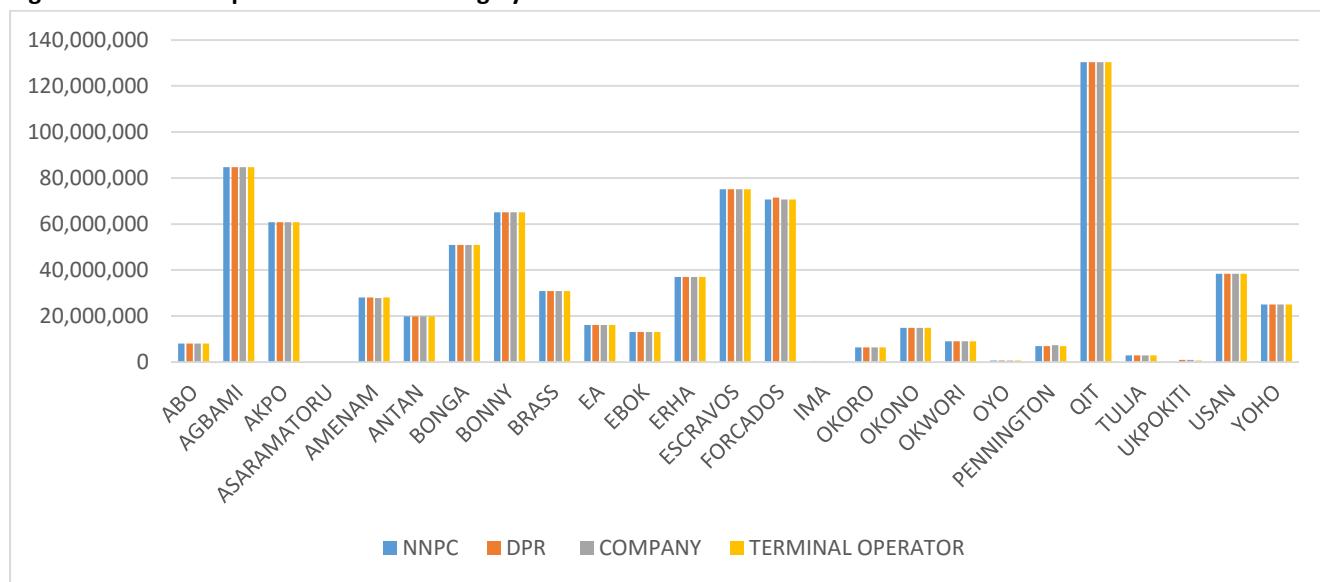


Table 8.4.1E: Disaggregated Export Data by region

STREAM	NNPC	DPR	COMPANY	TERMINAL OPERATOR
Western Zone				
EA	16,175,525	16,175,525	16,175,525	16,175,525
ABO	7,973,513	7,973,515	7,973,515	7,973,515
ESCRAVOS	75,041,673	75,041,673	75,041,673	75,041,673
FORCADOS	70,710,265	71,470,045	70,710,265	70,710,265
OYO	671,221	671,221	671,221	671,221
PENNINGTON	6,891,180	6,891,180	7,359,788	6,891,180
TULJA	2,957,822	2,957,822	2,957,822	2,957,822
UKPOKITI	982,136	982,136	982,136	684,686
TOTAL	181,403,335	182,163,117	181,871,945	181,105,887
Lagos Zone				
AGBAMI	84,752,375	84,752,375	84,752,375	84,752,375
AKPO	60,787,043	60,787,043	60,787,043	60,787,043
BONGA	50,858,029	50,858,029	50,858,029	50,858,029
ERHA	37,031,702	37,031,702	37,031,702	37,031,702
USAN	38,357,661	38,357,661	38,357,661	38,357,661
TOTAL	271,786,810	271,786,810	271,786,810	271,786,810
Eastern Zone				
STREAM	NNPC	DPR	COMPANY	TERMINAL OPERATOR
AMENAM	28,080,832	28,080,832	27,740,518	28,080,832

ANTAN	19,936,820	19,936,820	19,936,820	19,936,820
ASARAMATORU	169,756	-	-	-
BONNY	65,147,741	65,147,741	65,147,741	65,147,741
BRASS	30,866,918	30,866,918	30,866,918	30,866,918
EBOK	13,118,644	13,118,643	13,118,643	13,118,643
IMA	209,822	209,822	209,822	209,822
OKORO	6,431,941	6,431,941	6,431,941	6,431,941
OKONO	14,831,223	14,831,286	14,831,286	14,831,286
OKWORI	9,057,835	9,057,835	9,057,835	9,057,835
QIT	130,387,983	130,387,983	130,387,983	130,387,981
YOHO	24,969,999	24,969,999	24,969,999	24,969,999
TOTAL	343,209,514	343,039,820	342,699,506	343,039,818

8.4.2 Terminal Balance

Terminal balance is the reconciliation of gross volumes of crude oil (oil, water and sediments) produced and transferred to the terminals. This is how the operators calculate their net barrels in the terminals. However, there were differences in the populated terminal balance templates. These differences were reconciled after reviewing the original log used by the operators.

Table 8.4.2 - Comparison between Terminal and Calculated Opening and Closing Stock

BBLS	TERMINAL	2013 OPENING STOCK	2013 CLOSING STOCK
Terminal values	ABO	514,855	564,243
Calculated values		514,855	551,614
Terminal values	AGBAMI	576,390	695,143
Calculated values		576,390	695,143
Terminal values	AKPO	638,262	873,436
Calculated values		638,267	873,436
Terminal values	ANTAN	716,017	595,893
Calculated values		716,017	595,893

BBLS	TERMINAL	2013 OPENING STOCK	2013 CLOSING STOCK
Terminal values	BONGA	1,099,711	1,145,844
Calculated values		1,099,711	1,145,844
Terminal values	BONNY	824,252	484,779
Calculated values		824,252	484,779
Terminal values	BRASS	947,068	1,419,396
Calculated values		947,068	1,419,396
Terminal values	EA	881,956	333,339
Calculated values		881,956	333,339
Terminal values	EBOK	356,615	119,522
Calculated values		356,615	119,522
Terminal values	ERHA	575,838	1,201,746
Calculated values		575,838	1,201,731
Terminal values	ESCRAVOS	915,478	1,046,531
Calculated values		915,478	1,046,531
Terminal values	FORCADOS	-17,271	169,407
Calculated values		-17,271	169,408
Terminal values	IMA	68,468	117,688
Calculated values		68,468	117,688
Terminal values	OKORO	648,830	817,943

BBLS	TERMINAL	2013 OPENING STOCK	2013 CLOSING STOCK
Calculated values		648,830	817,943
Terminal values	ODUDU/AMENAM	347,037	1,744,434
Calculated values		347,037	1,744,434
Terminal values	OKONO	99,323	195,952
Calculated values		54,051	155,004
Terminal values	OKWORI	503,042	977,959
Calculated values		503,042	977,959
Terminal values	OYO	104,259	245,505
Calculated values		104,259	245,505
Terminal values	PENNINGTON	0	0
Calculated values		-4,930	-135,965
Terminal values	QIT	1,309,335	1,464,533
Calculated values		1,309,328	1,569,322
Terminal values	TULJA	27,945	174,599
Calculated values		27,945	174,599
Terminal values	UKPOKITI		
Calculated values		228,430	
Terminal values	USAN	560,482	1,450,364
Calculated values		431,081	1,387,431

BBLS	TERMINAL	2013 OPENING STOCK	2013 CLOSING STOCK
Terminal values	YOHO	473,406	644,653
Calculated values		473,406	643,813
Terminal values	EKANGA/ZAFIRO	324,577	491,642
Calculated values		324,577	491,642
Terminal values	TOTAL	12,495,875	16,974,551
Calculated values		12,544,700	16,826,011

Source: 2012 NEITI Oil & Gas Report and Company's' Terminal Balance For 2013

The reported opening stock for 2013 as reported by the companies in their terminal balance and the reconciled closing stock for 2012 showed little variance.

Analysis of each terminal balance revealed that data on some templates were incorrectly populated. There were issues of transposition of data as the companies tried to transfer data from their existing system to fit into NEITI templates. The main objective of reconciling respective terminals' opening and closing stocks is to make sure that there is volumetric balance between crude oil transferred into the terminal and exported.

8.4.3 Analysis of Net Oil Balances and Gross Volumes Mass Balances

Summaries of the reconciliations of the gross balances at each terminal are set out below.

Note that reference is made to the following for each terminal:

- 2012 stock balance (closing stock)
- Production data for the year as reported in the templates (with additional sections added for 3rd party injections where applicable).
- Terminal Balance (total receipts, liftings, terminal dewatering, terminal adjustment and stock change)
- Liftings data (as reported by the terminal operator, reconciled to data provided by each individual lifter)

Facility: Abo FPSO

Location: Offshore

Operator: Nigerian Agip Exploration (NAE)

Production Arrangement: Production Sharing Contract (PSC)

3rd Party Injector/Concession/Partners: OANDO E&P

ABO 2013			Operator: NAE		
Production (P1.02)			Opening Stock from last Audit		
Gross Production	De-watering/Shrinkage	Liquid Passed		514,855	Variance
8,075,004	13,628	8,061,376			-
		8,061,376			
Opening Stock 1 Jan 13		514,855	NNPC Crude Production	8,022,903	variance (DPR - Coy)
Total Liquid Receipts		8,075,004			38,473
De-Water/Shrinkage		13,628	DPR Production Crude	8,022,897	variance (DPR - Coy)
Terminal Adjustments		-51,102			-38,479
Liftings		7,973,515	Calculated Closing Stock	551,614	variance
Closing Stock		564,243			12,629
Liftings (Terminal Balance)	bbls		Terminal/Fiscal Data	bbls	
NNPC		3,394,184	NNPC	3,394,184	0
NAE		4,249,331	NAE	4,249,331	0
OANDO		330,000	OANDO	330,000	0
		7,973,515		7,973,515	0
			Lifting Differences (TER. Vs Coy)	bbls	
				0	
Year	Production (NSV)	%			
2012	8,488,131				
2013	8,061,376	5.028			

Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template

 Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR

 Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production

 Data not available at the time of analysis. Respective Entity to provide

Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates

Observations:

- Overall production declined by 5.028% compared to 2012 production volumes
- Total fiscalised terminal receipts was reported as 8,010,274 bbls (after all adjustments) by NAE
- DPR and NNPC fiscalised production figures varied with NAE's volume with -38,473 bbls and 38,473 bbls respectively.
- There was a variance of 12,629 bbls in Abo's closing stock volume and the Audit calculated closing stock.

The audit could not reconcile these variances as at the time of reporting because NAE, NNPC and DPR could not provide all the supporting documents.

Facility: Agbami FPSO

Location: Offshore

Operator: Star Deep Water

Production Arrangement: Production Sharing Contract (PSC)

3rd Party Injector/Concession/Partners: Chevron, Famfa Oil, Petrobras & Statoil

AGBAMI 2013			Operator: STARDEEP		
Production (P1.02)			Opening Stock from last Audit		
Gross Production	De-watering/Shrinkage	Liquid Passed	576,390	Variance	-
84,871,128	0	84,871,128			
		84,871,128			
			NNPC Crude Production variance (DPR - Coy)		
			84,871,128	Variance	0
Opening Stock 1 Jan 13			DPR Production Crude variance (DPR - Coy)		
576,390			84,871,128	Variance	0
Total Liquid Receipts	84,871,128				
De-Water/Shrinkage	0				
Terminal Adjustments	0				
Liftings	84,752,375				
Closing Stock	695,143		Calculated Closing Stock	Variance	
			695,143	Variance	0
Liftings (Terminal Balance) bbls			Terminal/Fiscal Data bbls		
NNPC	15,536,126		NNPC	15,536,126	0
TNOS	7,789,435		TNOS	7,789,435	0
PETROBRAS	4,918,540		PETROBRAS	4,918,540	0
STATOIL	7,875,049		STATOIL	7,875,049	0
FAMFA	4,919,961		FAMFA	4,919,961	0
STARDEEP	43,713,264		STARDEEP	43,713,264	0
	84,752,375			84,752,375	0
			Lifting Differences (TER. Vs Coy) bbls		
			0		
Year	Production (NSV)	%	PRODUCTION CONTRIBUTION (NSV)		
2012	85,041,559		TERMINAL OPERATOR		
2013	84,871,128	0.2	TNOS	7,704,312	
			PETROBRAS	5,375,534	
			STATOIL	8,710,088	
			FAMFA	4,526,326	
			STARDEEP/NNPC	58,554,869	
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit					
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template					
 Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR					
 Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production					
 Data not available at the time of analysis. Respective Entity to provide					
Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates					

Observations

- Overall production declined by 0.2% compared to 2012 production volumes

The audit found no variances in the individual entities submissions.

Facility: Akpo FPSO

Location: Offshore

Operator: Total Upstream Nigeria Limited

Production Arrangement: Production Sharing Contract (PSC)

3rd Party Injector/Concession/Partners: Sapetro, CNOOC & Petrobras (Brasoil)

AKPO 2013			Operator: TUPNI	
Production (P1.02)			Opening Stock from last Audit	Variance
Gross Production	De-watering/Shrinkage	Liquid Passed	638,267	5
61,032,036	9,819	61,022,217		
		61,022,217	NNPC Crude Production	variance (DPR - Coy)
			60,798,261	223,956
Opening Stock 1 Jan 13	638,262		DPR Production Crude	variance (DPR - Coy)
Total Liquid Receipts	61,032,036		61,012,205	-10,012
De-Water/Shrinkage	-7,747			
Terminal Adjustments	-2,072			
Liftings	60,787,043		Calculated Closing Stock	variance
Closing Stock	873,436		873,436	0
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data bbls	Liftings (DPR) bbls	Variance (Coy vs)
NNPC	18,923,498	NNPC	18,923,498	0
SAPETRO	3,084,637	SAPETRO	3,084,637	0
CNOOC	16,066,162	CNOOC	16,066,162	0
BRASOIL	8,039,025	BRASOIL	8,039,025	0
TUPNI	14,673,721	TUPNI	14,673,721	0
	60,787,043		60,787,043	60,787,043
		Lifting Differences (TER. Vs Coy) bbls		
			0	
Year	Production (NSV)	%		
2012	56,667,027	7.686		
2013	61,022,217			

Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit
 Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template

Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR

Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production

Data not available at the time of analysis. Respective Entity to provide

Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates

Observations:

- Overall production increased by 7.686% compared to 2012 production volumes
- There were variances in production volume between NNPC, DPR and TUPNI

Facility: Odudu FSO

Location: Offshore

Operator: Total E&P Nigeria Limited

Production Arrangement: Joint Venture (JV)

3rd Party Injector/Concession/Partners: NNPC

AMENAM/ODUDU 2013			Operator: TEPNG		
Production (P1.02)			Opening Stock from last Audit	Variance	
Gross Production	De-watering/Shrinkage	Liquid Passed	347,037	-	
29,478,229	0	29,478,229			
		29,478,229	NNPC Crude Production	variance (DPR - Coy)	
			29,589,705	-111,476	
Opening Stock 1 Jan 13	347,037		DPR Production Crude	variance (DPR - Coy)	
Total Liquid Receipts	29,478,229		29,478,222	-7	
De-Water/Shrinkage	0				
Terminal Adjustments	0				
Liftings	28,080,832		Calculated Closing Stock	variance	
Closing Stock	1,744,434		1,744,434	0	
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data bbls	Liftings (DPR) bbls	Variance (Coy vs DPR)	
NNPC	17,089,510	NNPC	16,749,196	340,314	
TEPNG	10,991,322	TEPNG	10,991,322	0	
	28,080,832		27,740,518	340,314	
		Lifting Differences (TER. Vs Coy) bbls			
			340,314		
Year	Production (NSV)	%			
2012	36,765,692	19.821			
2013	29,478,229				

Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template
 Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Fiscalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR
 Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production
 Data not available at the time of analysis. Respective Entity to provide

Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates

Observations:

- Overall production declined by 19.821% compared to 2012 production volumes
- Total fiscalised terminal receipts was reported as 29,478,229 bbls (after all adjustments) by TEPNG
- NNPC fiscalised production figures varied with TEPNG volume with -111,476 bbls.
- There was a variance of 340,314 bbls in Lifting volumes as reported by the same entity (TEPNG) in its Terminal Balance and Crude Lifting (Fiscal Value Data) Templates.

The audit could not reconcile these variances as at the time of reporting.

Facility: Antan

Location: Offshore

Operator: Addax Petroleum Limited

Production Arrangement: Production Sharing Contract (PSC)

3rd Party Injector/Concession/Partners: Monipulo

ANTAN 2013		Operator: ADDAX		
Production (P1.02)		Opening Stock from last Audit		
Gross Production	De-watering/Shrinkage	Liquid Passed	716,017	-
19,816,696	0	19,816,696		
		19,816,696		
Opening Stock 1 Jan 13		NNPC Crude Production variance (DPR - Coy)		
Total Liquid Receipts	716,017	DPR Production Crude	19,816,696	0
De-Water/Shrinkage	19,816,696			
Terminal Adjustments	0	Calculated Closing Stock	595,893	0
Liftings	0			
Closing Stock	19,936,820			
	595,893			
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data bbls		
NNPC	6,643,155	NNPC	6,642,636	0
ADDAX	11,923,437	ADDAX	11,923,956	0
MONIPULO	1,370,228	MONIPULO	1,370,228	0
	19,936,820		19,936,820	0
		Lifting Differences (TER. Vs Coy bbls)		
		0		
Year	Production (NSV)	%	PRODUCTION CONTRIBUTION (NSV)	
2012	18,640,807	↑ 6.308	TERMINAL OPERATOR DPR	
2013	19,816,696		ADDAX	18,656,696
			MONIPULO	1,159,727
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit				
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template				
 Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR				
 Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production				
 Data not available at the time of analysis. Respective Entity to provide				
<i>Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates</i>				

Observations

- Overall production increased by 6.308% compared to 2012 production volumes

The audit found no variances in the individual entities submissions.

Facility: Bonga FPSO

Location: Offshore

Operator: Shell Nigeria Exploration and Production Company

Production Arrangement: Production Sharing Contract (PSC)

3rd Party Injector/Concession/Partners: TEPNG, ExxonMobil, NAE

BONGA 2013			Operator: SNEPCO		
Production (P1.02)			Opening Stock from last Audit		
Gross Production	De-watering/Shrinkage	Liquid Passed		1,099,711	Variance
50,904,162	0	50,904,162			-
		50,904,162	NNPC Crude Production	50,947,329	variance (DPR - Coy) -43,167
Opening Stock 1 Jan 13	Total Liquid Receipts	De-Water/Shrinkage	DPR Production Crude	variance (DPR - Coy)	
1,099,711	50,904,162	0	50,904,162	0	
Terminal Adjustments	Liftings	Closing Stock	Calculated Closing Stock	variance	
0	50,858,029	1,145,844	1,145,844	0	
Liftings (Terminal Balance) bbls			Terminal/Fiscal Data	bbls	Liftings (DPR) bbls
NNPC	29,032,055		NNPC	29,032,055	29,032,055
SNEPCO	11,242,863		SNEPCO	11,242,863	11,242,863
MPNU	4,720,335		MPNU	4,720,335	4,720,335
TEPNG	2,955,005		TEPNG	2,955,005	2,955,005
NAE	2,907,771		NAE	2,907,771	2,907,771
	50,858,029			50,858,029	50,858,029
			Lifting Differences (TER. Vs Coy bbls)		
			0		
Year	Production (NSV)	%	PRODUCTION CONTRIBUTION (NSV)		
2012	64,067,957	20.547	TERMINAL OPERATOR		
2013	50,904,162		SNEPCO/NNPC	39,973,061	
			TEPNG	3,036,417	
			NAOC	3,036,417	
			MPNU	4,858,267	
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit					
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template					
Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR					
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production					
Data not available at the time of analysis. Respective Entity to provide					
<i>Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates</i>					

Observations

- Overall production declined significantly by 20.547% compared to 2012 production volumes

The audit found no significant variances in the individual entities submissions.

Facility: Bonny Terminal

Location: Onshore

Operator: Shell Petroleum Development Company (SPDC)

Production Arrangement: Joint Venture (JV)

3rd Party Injector/Concession/Partners: TEPNG, Chevron, WalterSmith, Agip & NDPR

BONNY 2013		Operator: SPDC		
Production (P1.02)		Opening Stock from last Audit		Variance
Gross Production	De-watering/Shrinkage	Liquid Passed		
64,819,152	0	64,819,152	824,252	-
		64,819,152		
			NNPC Crude Production	variance (DPR - Coy)
			65,011,265	-192,113
Opening Stock 1 Jan 13	Total Liquid Receipts	824,252	DPR Production Crude	variance (DPR - Coy)
		64,819,152	64,667,075	-152,077
De-Water/Shrinkage	0			
Terminal Adjustments	-10,884			
Liftings	65,147,741		Calculated Closing Stock	variance
Closing Stock	484,779		484,779	0
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data bbls		Analysis of Lifting
NNPC/REFINERY	29,333,619	NNPC/REFINERY	35,090,582	TOTAL NNPC LIFTING 35,090,582
SPDC	16,722,785	SPDC	16,722,785	Broken down into
TEPNG/SPDC JV	5,716,745	TEPNG	8,624,997	NNPC ex-SPDC JV 29,333,619
NAOC	2,805,527	NAOC	2,805,527	NNPC ex-Chevron JV 1,526,008
CNL	2,355,608	CNL	829,600	NNPC ex-Total JV 4,230,955
WSPOL	809,250	WSPOL	809,250	
NDPR	265,000	NDPR	265,000	
TEPNG/NNPC JV	7,139,207			
	65,147,741		65,147,741	0
Lifting Differences (TER. Vs Coy) bbls				
			0	
Year	Production (NSV)	%	PRODUCTION CONTRIBUTION (NSV)	
2012	85,516,915	↓	TERMINAL OPERATOR	3RD PARTY
2013	64,819,152	24.20	SPDC/NNPC JV	DPR
			53,728,972	53,784,953
			7,615,431	7,706,832
			2,269,744	2,267,712
			875,722	870,338
			329,282	329,282
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production Data not available at the time of analysis. Respective Entity to provide				
<i>Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates</i>				

Observations

- Overall production declined significantly by 24.20% compared to 2012 production volumes
- Total fiscalised terminal receipts was reported as 64,808,268 bbls (after all adjustments) by SPDC
- DPR and NNPC fiscalised production figures varied with SPDC's volume.

The audit could not reconcile these variances as at the time of reporting.

Facility: Brass Terminal

Location: Onshore

Operator: Nigerian Agip Oil Company (NAOC)

Production Arrangement: Joint Venture (JV)

3rd Party Injector/Concession/Partners: Philips Oil, SPDC, Agip Energy and Natural Resources, Addax Petroleum, Total E&P Nig. Limited, Midwestern Oil & Energia.

BRASS 2013			Operator: NAOC		
Production (P1.02)			Opening Stock from last Audit		
Gross Production	De-watering/Shrinkage	Liquid Passed	Opening Stock from last Audit	Variance	
65,575,354	33,981,792	31,593,562	947,068	-	
		31,593,562	NNPC Crude Production	variance (DPR - Coy)	
			31,247,781	345,781	
Opening Stock 1 Jan 13		947,068	DPR Production Crude	variance (DPR - Coy)	
Total Liquid Receipts		65,554,490	31,339,249	-254,313	
De-Water/Shrinkage		-33,981,792			
Terminal Adjustments		-254,316			
Liftings		30,866,918	Calculated Closing Stock	variance	
Closing Stock		1,419,396	1,419,396	0	
Liftings (Terminal Balance) bbls			Terminal/Fiscal Data bbls		
NNPC	10,879,615		NNPC	15,989,499	Liftings (DPR) bbls variance (Coy vs DPR)
AGIP	3,984,949		AGIP	4,204,949	0
PHILLIPS	4,165,268		PHILLIPS	4,165,268	0
SPDC	2,118,677		SPDC	949,510	0
AENR	3,647,507		AENR	998,300	0
ADDAX	2,777,902		ADDAX	1,266,392	0
PLATFORM	3,293,000		PLATFORM	389,000	0
			TOTAL	0	0
			MIDWESTERN	1,950,000	0
			PILLAR	383,000	0
			ENERGIA	571,000	0
		30,866,918		30,866,918	0
			Lifting Differences (TER. Vs Coy bbls)		
			0		
Year	Production (NSV)	%			
2012	38,431,091				
2013	31,593,562	17.79			

Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template
Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production
Data not available at the time of analysis. Respective Entity to provide

Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates

Observations

- Overall production declined by 17.790% compared to 2012 production volumes
- Total fiscalised terminal receipts was reported as 31,339,246 bbls (after all adjustments) by NAOC
- There was slight variance with DPR and NNPC fiscalised production figures.

The audit could not reconcile these variances as at the time of reporting.

Facility: Sea Eagle FPSO

Location: Offshore

Operator: Shell Petroleum Development Company (SPDC)

Production Arrangement: Joint Venture (JV)

3rd Party Injector/Concession/Partners: Total E&P Nig. Limited & Nigerian Agip Oil Company (NAOC)

EA 2013			Operator: SPDC		
Production (P1.02)			Opening Stock from last Audit		Variance
Gross Production	De-watering/Shrinkage	Liquid Passed		881,956	-
15,626,908		15,626,908			
		15,626,908	NNPC Crude Production	variance (DPR - Coy)	
			15,626,908	0	
Opening Stock 1 Jan 13	881,956		DPR Production Crude	variance (DPR - Coy)	
Total Liquid Receipts	15,626,908		15,626,909	1	
De-Water/Shrinkage	0				
Terminal Adjustments	642				
Liftings	16,175,525		Calculated Closing Stock	variance	
Closing Stock	333,339		333,339	0	
Liftings (Terminal Balance)	bbls	Terminal/Fiscal Data	bbls	Liftings (DPR) bbels	Variance (Coy vs DPR)
NNPC	9,440,507	NNPC	9,440,507	9,440,507	0
SPDC	3,889,756	SPDC	3,889,756	3,889,756	0
TEPNG	1,897,301	TEPNG	1,897,301	1,897,301	0
NAOC	947,961	NAOC	947,961	947,961	0
	16,175,525		16,175,525	16,175,525	0
		Lifting Differences (TER. Vs Coy)	bbls		
			0		
Year	Production (NSV)	%			
2012	21,075,517				
2013	15,626,908	25.853			
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit					
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template					
Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR					
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production					
Data not available at the time of analysis. Respective Entity to provide					

Observations

- Overall production declined significantly by 25.853% compared to 2012 production volumes

The audit found no variances in the individual entities submissions.

Facility: Ebok

Location: Offshore

Operator: Oriental Energy

Production Arrangement: Sole Risk

3rd Party Injector/Concession/Partners: Afren Resources Limited

EBOK 2013			Operator: ORIENTAL ENERGY	
Production (P1.02)				
Gross Production	De-watering/Shrinkage	Liquid Passed	Opening Stock from last Audit	Variance
18,908,044	5,959,281	12,948,763	356,615	0
		12,948,763	NNPC Crude Production	variance (DPR - Coy)
			12,948,763	0
Opening Stock 1 Jan 13	356,615		DPR Production Crude	variance (DPR - Coy)
Total Liquid Receipts	18,908,044		12,948,763	0
De-Water/Shrinkage	5,959,281			
Terminal Adjustments	-67,213			
Liftings	13,118,643		Calculated Closing Stock	variance
Closing Stock	119,522		119,522	0
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data bbls	Liftings (DPR) bbls	variance (Coy vs DPR)
ORIENTAL	13,118,643	ORIENTAL	13,118,643	13,118,643
	13,118,643		13,118,643	0
		Lifting Differences (TER. Vs Coy) bbls		
			0	
Year	Production (NSV)	%		
2012	11,122,113			
2013	12,948,763	14.107		
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit				
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template				
Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR				
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production				
Data not available at the time of analysis. Respective Entity to provide				
Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates				

Observations

- Overall production increased by 14.107% compared to 2012 production volumes
- The relevant entities (Oriental & DPR) could not provide the audit with signed reconciled lifting data.

Facility: Erha FPSO

Location: Offshore

Operator: Esso Exploration and Production Nigeria Limited (EEPNL)

Production Arrangement: Production Sharing Contract (PSC)

3rd Party Injector/Concession/Partners: SNEPCO

ERHA 2013		Operator: ESSO EXPLORATION		
Production (P1.02)		Opening Stock from last Audit		Variance
Gross Production	De-watering/Shrinkage	Liquid Passed		
37,657,595	0	37,657,595		
		37,657,595	NNPC Crude Production	variance (DPR - Coy)
			37,634,014	23,581
Opening Stock 1 Jan 13	575,838	DPR Production Crude	variance (DPR - Coy)	
Total Liquid Receipts	37,657,595	37,657,596	1	
De-Water/Shrinkage	0			
Terminal Adjustments	0			
Liftings	37,031,702	Calculated Closing Stock	variance	
Closing Stock	1,201,746	1,201,731	15	
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data	bbls	Liftings (DPR) bbls
NNPC	20,813,321	NNPC	20,813,321	20,813,321
SNEPCO	6,851,842	SNEPCO	6,851,842	6,851,842
EEPNL	9,366,539	EEPNL	9,366,539	9,366,539
	37,031,702		37,031,702	37,031,702
		Lifting Differences (TER. Vs Coy) bbls		0
Year	Production (NSV)	%		
2012	45,680,658			
2013	37,657,595	17.563		
Opening Stock from Last Audit = The reconcilled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit				
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template				
 Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR				
 Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production				
 Data not available at the time of analysis. Respective Entity to provide				

Observations

- Overall production declined significantly by 17.563% compared to 2012 production volumes

The audit found no significant variances in the individual entities submissions.

Facility: Escravos Terminal

Location: Onshore

Operator: Chevron Nigeria Limited (CNL)

Production Arrangement: Joint Venture (JV)

3rd Party Injector/Concession/Partners: Britania-U, ConOil, Dubri Oil

ESCRAVOS 2013			Operator: CHEVRON		
Production (P1.02)			Opening Stock from last Audit	Variance	
Gross Production	De-watering/Shrinkage	Liquid Passed	915,478	-	
75,172,726	0	75,172,726			
		75,172,726	NNPC Crude Production	variance (DPR - Coy)	
			75,175,535	-2,809	
Opening Stock 1 Jan 13	915,478		DPR Production Crude	variance (DPR - Coy)	
Total Liquid Receipts	75,172,726		75,172,726	0	
De-Water/Shrinkage	0				
Terminal Adjustments	0				
Liftings	75,041,673		Calculated Closing Stock	variance	
Closing Stock	1,046,531		1,046,531	0	
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data bbls	Liftings (DPR) bbls	Variance (Coy vs DPR)	
BRITANIA U	398,000	BRITANIA U	398,000	398,000	0
DUBRI	110,500	DUBRI	110,500	110,500	0
CONOIL	560,000	CONOIL	560,000	560,000	0
NNPC/PPMC	42,507,460	NNPC/PPMC	42,507,460	42,507,460	0
CNL	31,465,713	CNL	31,465,713	31,465,713	0
	75,041,673		75,041,673	75,041,673	0
		Lifting Differences (TER. Vs Coy) bbls			
			0		
Year	Production (NSV)	%	PRODUCTION CONTRIBUTION (NSV)		
2012	82,992,947	9.423	TERMINAL OPERATOR	3RD PARTY	DPR
2013	75,172,726		BRITANIA U	324,094	334,646
			DUBRI	109,453	109,988
			CONOIL	510,230	516,668
			CNL/NNPC	74,228,949	NA
					74,228,949
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit					
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template					
 Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR					
 Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production					
 Data not available at the time of analysis. Respective Entity to provide					
Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates					

Observations

- Overall production declined by 9.423% compared to 2012 production volumes

The audit found no significant variances in the individual entities submissions.

Facility: Forcados Terminal

Location: Onshore

Operator: Shell Petroleum Development Company (SPDC)

Production Arrangement: Joint Venture (JV)

3rd Party Injector/Concession/Partners: Total E&P Nig. Limited, NAOC, Philips Oil, NPDC, Seplat, First Hydrocarbon, Neconde, Septa & ND Western

FORCADOS 2013				Operator: SPDC		
Production (P1.02)				Opening Stock from last Audit	Variance	
Gross Production	De-watering/Shrinkage	Liquid Passed		(17,271)	-	
70,899,766	0	70,899,766				
		70,899,766				
				NNPC Crude Production variance (DPR - Coy)	70,428,513 471,253	
				DPR Production Crude variance (DPR - Coy)	71,000,792 101,026	
Opening Stock 1 Jan 13	-17,271					
Total Liquid Receipts	70,899,766					
De-Water/Shrinkage	0					
Terminal Adjustments	-2,822					
Liftings	70,710,265					
Closing Stock	169,407					
Liftings (Terminal Balance) bbis		bbis		Calculated Closing Stock	variance	
NNPC	19,011,279			169,408	-1	
SPDC	11,263,717					
TEPNG	2,947,577					
NAOC	1,319,780					
FHN	3,985,314					
ND WESTERN	654,176					
NECONDE	2,928,079					
NPDC	1,735,725					
PHILIPS	1,482,074					
SEPLAT	16,130,919					
AGIP	90,256					
SHORELINE	9,161,369					
	70,710,265					
		Lifting Differences (TER. Vs Coy) bbis				
		0				
Year	Production (NSV)	%		PRODUCTION CONTRIBUTION (NSV)		
2012	72,439,137	2.13		TERMINAL OPERATOR DPR		
2013	70,899,766			SPDC/NNPC		
				TEPNG	33,197,358	
				NAOC		
				FHN	3,763,507	3,763,507
				ND WESTERN	741,112	741,112
				NECONDE	3,080,534	3,080,534
				NPDC	2,192,379	2,192,179
				SEPLAT	18,732,446	18,618,743
				AGIP	371,479	371,490
				SHORELINE	7,419,698	7,419,698
				PANOCEAN	1,401,254	
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit						
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template						
Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR						
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production						
Data not available at the time of analysis. Respective Entity to provide						
Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates						

Observations

- Overall production declined by 2.13% compared to 2012 production volumes
- Total fiscalised terminal receipts was reported as 70,896,944 bbls (after all adjustments) by SPDC
- DPR and NNPC fiscalised production figures varied with SPDC's volume with 101,026 bbls and 471,253 bbls respectively.
- There was a variance of 759,780 bbls in lifting records between SPDC and DPR
- PanOcean did not provide reconciled Production Volume data with DPR

The audit could not reconcile these variances as at the time of reporting.

Facility: Okoro

Location: Offshore

Operator: AMNI

Production Arrangement: Marginal

3rd Party Injector/Concession/Partners:

OKORO 2013			Operator: AMNI		
Production (P1.02)			Opening Stock from last Audit		
Gross Production	De-watering/Shrinkage	Liquid Passed		NA	Variance
6,584,898	0	6,584,898			
		6,584,898	NNPC Crude Production	variance (DPR - Coy)	
			6,624,751	-39,853	
Opening Stock 1 Jan 13	648,830		DPR Production Crude	variance (DPR - Coy)	
Total Liquid Receipts	6,584,898		6,584,898	0	
De-Water/Shrinkage	0				
Terminal Adjustments	16,156				
Liftings	6,431,941		Calculated Closing Stock	variance	
Closing Stock	817,943		817,943	0	
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data	bbls	Liftings (DPR) bbls	Variance (Coy vs DPR)
OKORO	6,431,941	OKORO	6,431,941	6,431,941	0
	6,431,941		6,431,941	6,431,941	0
		Lifting Differences (TER. Vs Coy) bbls			
			0		
Year	Production (NSV)	%			
2012	NA	—			
2013	6,584,898	?			
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit					
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template					
Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR					
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production					
Data not available at the time of analysis. Respective Entity to provide					
Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates					

Observations

- Overall production change could not be determined as there is no data for such in the previous audit.

The audit found no variances in the individual entities submissions.

Facility: Ima

Location: Offshore

Operator: AMNI

Production Arrangement: Marginal

3rd Party Injector/Concession/Partners:

IMA 2013			Operator: AMNI		
Production (P1.02)			Opening Stock from last Audit		Variance
Gross Production	De-watering/Shrinkage	Liquid Passed		NA	
260,051	0	260,051			
		260,051	NNPC Crude Production	variance (DPR - Coy)	
			260,051	0	
Opening Stock 1 Jan 13	68,468		DPR Production Crude	variance (DPR - Coy)	
Total Liquid Receipts	260,051		260,051	0	
De-Water/Shrinkage	0				
Terminal Adjustments	-1,009				
Liftings	209,822		Calculated Closing Stock	variance	
Closing Stock	117,688		117,688	0	
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data	bbls	Liftings (DPR) bbls	variance (Coy vs DPR)
IMA	209,822	IMA	209,822	209,822	0
	209,822			209,822	209,822
		Lifting Differences (TER. Vs Coy) bbls			
			0		
Year	Production (NSV)	%			
2012	NA	—			
2013	260,051	?			

Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template

Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Fiscalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR

Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production

Data not available at the time of analysis. Respective Entity to provide

Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates

Observations

- Overall production change could not be determined as there is no data for such in the previous audit.

The audit found no variances in the individual entities submissions.

Facility: Okono

Location: Onshore

Operator: Nigerian Petroleum Development Company (NPDC)

Production Arrangement: Sole Risk

3rd Party Injector/Concession/Partners: Agip Energy and Natural Resources (AENR)

OKONO 2013			Operator: NPDC		
Production (P1.02)			Opening Stock from last Audit		
Gross Production	De-watering/Shrinkage	Liquid Passed	54,051	45,272	Variance
19,332,292	4,424,851	14,907,441			
		14,907,441	NNPC Crude Production	variance (DPR - Coy)	
			14,917,919	-10,478	
Opening Stock 1 Jan 13	99,323		DPR Production Crude	variance (DPR - Coy)	
Total Liquid Receipts	19,332,292		14,904,197	-3,244	
De-Water/Shrinkage	4,424,851				
Terminal Adjustments	-20,474				
Liftings	14,831,286		Calculated Closing Stock	variance	
Closing Stock	195,952		155,004	40,948	
Liftings (Terminal Balance) bbls					
AENR	1,245,938		AENR	1,245,938	
NPDC	13,585,348		NPDC	13,585,348	
	14,831,286			14,831,286	14,831,286
					0
			Lifting Differences (TER. Vs Coy) bbls		
			0		
Year	Production (NSV)	%			
2012	16,303,397	8.562			
2013	14,907,441				

Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template
Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production
Data not available at the time of analysis. Respective Entity to provide

Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates

Observations

- Overall production declined by 8.562% compared to 2012 production volumes
- Total fiscalised terminal receipts was reported as 14,886,967 bbls (after all adjustments) by NPDC
- There were variances in the Opening stock, closing stock and production volumes with DPR and NNPC.

The audit could not reconcile these variances as at the time of reporting.

Facility: Okwori

Location: Offshore

Operator: Addax Petroleum Exploration Nigeria Limited (APENL)

Production Arrangement: Production Sharing Contract (PSC)

3rd Party Injector/Concession/Partners:

OKWORI 2013			Operator: ADDAX		
Production (P1.02)			Opening Stock from last Audit		Variance
Gross Production	De-watering/Shrinkage	Liquid Passed	503,042	-	
9,532,752	0	9,532,752			
		9,532,752	NNPC Crude Production	variance (DPR - Coy)	
			9,532,752	0	
Opening Stock 1 Jan 13	503,042		DPR Production Crude	variance (DPR - Coy)	
Total Liquid Receipts	9,532,752		9,532,779	27	
De-Water/Shrinkage	0				
Terminal Adjustments	0				
Liftings	9,057,835		Calculated Closing Stock	variance	
Closing Stock	977,959		977,959	0	
Liftings (Terminal Balance) bbls					
NNPC	4,532,227		NNPC	4,532,227	0
ADDAX	4,525,608		ADDAX	4,525,608	0
	9,057,835			9,057,835	0
			Lifting Differences (TER. Vs Coy) bbls		
			0		
Year	Production (NSV)	%			
2012	12,094,784				
2013	9,532,752	21.183			
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit					
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template					
Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR					
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production					
Data not available at the time of analysis. Respective Entity to provide					
<i>Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates</i>					

Observations

- Overall production declined significantly by 21.183% compared to 2012 production volumes

The audit found no variances in the individual entities submissions.

Facility: Oyo

Location: Offshore

Operator: Allied Energy Plc.

Production Arrangement: Marginal

3rd Party Injector/Concession/Partners:

OYO 2013			Operator: ALLIED ENERGY	
Production (P1.02)				
Gross Production	De-watering/Shrinkage	Liquid Passed	Opening Stock from last Audit	Variance
3,232,624	2,429,575	803,049	104,259	
		803,049	NNPC Crude Production	variance (DPR - Coy)
			803,229	-180
Opening Stock 1 Jan 13	104,259		DPR Production Crude	variance (DPR - Coy)
Total Liquid Receipts	3,232,624		812,467	9,418
De-Water/Shrinkage	2,429,575			
Terminal Adjustments	9,418			
Liftings	671,221		Calculated Closing Stock	variance
Closing Stock	245,505		245,505	0
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data bbls	Liftings (DPR) bbls	variance (Coy vs DPR)
ALLIED	671,221	ALLIED	671,221	671,221
	671,221		671,221	0
		Lifting Differences (TER. Vs Coy) bbls		
			0	
Year	Production (NSV)	%		
2012	1,009,842			
2013	812,467	19.545		
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit				
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template				
Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR				
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production				
Data not available at the time of analysis. Respective Entity to provide				
Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates				

Observations

- Overall production declined by 19.545% compared to 2012 production volumes

The audit found no variances in the individual entities submissions.

Facility: Pennington

Location: Offshore

Operator: Chevron Nigeria Limited

Production Arrangement: Joint Venture (JV)

3rd Party Injector/Concession/Partners: CONOG

PENNINGTON 2013			Operator: CHEVRON		
Production (P1.02)			Opening Stock from last Audit		
Gross Production	De-watering/Shrinkage	Liquid Passed	(4,930)	(4,930)	
7,226,812	0	7,226,812			
		7,226,812			
Opening Stock 1 Jan 13	Total Liquid Receipts	0	NNPC Crude Production	variance (DPR - Coy)	
		7,226,812	7,358,462	-131,650	
De-Water/Shrinkage	0				
Terminal Adjustments	2,989		DPR Production Crude	variance (DPR - Coy)	
Liftings	7,359,788		7,357,435	130,623	
Closing Stock		0			
			Calculated Closing Stock	variance	
			-135,965	135,965	
Liftings (Terminal Balance) bbls			Terminal/Fiscal Data		
CONOG	5,437,511		CONOG	5,904,571	5,904,571
NNPC	986,609		NNPC	986,609	986,609
CNL	935,668		CNL		0
		7,359,788		6,891,180	6,891,180
Lifting Differences (TER. Vs Coy) bbls					
		468,608			
Year	Production (NSV)	%	PRODUCTION CONTRIBUTION (NSV)		
2012	9,102,862	20.609	TERMINAL OPERATOR	DPR	
2013	7,226,812		CNL/NNPC	2,638,334	2,638,334
			CONOG	4,588,478	4,719,101
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit					
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template					
Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Fiscalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR					
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production Data not available at the time of analysis. Respective Entity to provide					
Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates					

Observations

- Overall production declined significantly by 20.609% compared to 2012 production volumes
- Total fiscalised terminal receipts was reported as 7,229,801 bbls (after all adjustments) by CNL
- There were variances in the production volume with DPR and NNPC, opening stock and closing stock
- DPR reconciled export data recorded no lifting for CNL in 2013 as against 985,668 bbls recorded in the terminal balance template by CNL

The audit could not reconcile these variances as at the time of reporting. However, the following comment was made by Chevron:

"The terminal balance template and the crude lifting/ export reconciliation sign-off are not the same because "Direct Export" operations is employed in the production and export operations in Pennington Terminal since 2007. It follows therefore that some volumes in the terminal balance in a particular year gets lifted in the following year and this overlap continues into every year. the export data is only determined with the date on the Bill of Lading documents, while the data in the Terminal balance template is estimated for each year end."

Facility: Qua-Iboe

Location: Onshore

Operator: Mobil Producing Nigeria Unlimited (MPNU)

Production Arrangement: Joint Venture (JV)

3rd Party Injector/Concession/Partners:

QIT 2013			Operator: MPNU		
Production (P1.02)			Opening Stock from last Audit		Variance
Gross Production	De-watering/Shrinkage	Liquid Passed		1,309,328	(7)
130,674,970	0	130,674,970			
		130,674,970	NNPC Crude Production	variance (DPR - Coy)	
			131,019,938	-344,968	
Opening Stock 1 Jan 13	Total Liquid Receipts	1,309,335	DPR Crude Production	variance (DPR - Coy)	
		130,674,970	130,762,200	87,230	
De-Water/Shrinkage	0				
Terminal Adjustments	0				
Liftings		130,387,983	Calculated Closing Stock	variance	
Closing Stock		1,464,533	1,596,322	-131,789	
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data bbls		Liftings (DPR) bbls	Variance (Coy vs DPR)
MPN	53,948,260	MPN	51,193,837	53,043,423	1,849,586
NNPC	76,439,723	NNPC	79,194,144	77,344,560	-1,849,584
	130,387,983		130,387,981	130,387,983	2
		Lifting Differences (TER. Vs Coy) bbls			
			2		
Year	Production (NSV)	%			
2012	128,853,436	↑ 1.41			
2013	130,674,970				

Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template

Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR

Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production

Data not available at the time of analysis. Respective Entity to provide

Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates

Production from OSO platform is exported through QIT hence OSO platform data is part of QIT data.

Observations

- Overall production increased by 1.41% compared to 2012 production volumes
- There were variances in the production volume with DPR and NNPC and closing stock

The audit could not reconcile these variances as at the time of reporting.

Facility: Tulja

Location: Offshore

Operator: Sterling Oil Exploration and Energy Production Company Limited (SEEPCO)

Production Arrangement: Production Sharing Contract (PSC)

3rd Party Injector/Concession/Partners:

TULJA 2013			Operator: SEEPCO		
Production (P1.02)					
Gross Production	De-watering/Shrinkage	Liquid Passed	Opening Stock from last Audit	Variance	
3,104,832	0	3,104,832	27,945	-	
		3,104,832	NNPC Crude Production variance (DPR - Coy)		
			2,909,852	194,980	
Opening Stock 1 Jan 13	27,945		DPR Production Crude variance (DPR - Coy)		
Total Liquid Receipts	3,104,832		3,204,478	99,646	
De-Water/Shrinkage	0				
Terminal Adjustments	0				
Liftings	2,958,178		Calculated Closing Stock	variance	
Closing Stock	174,599		174,599	0	
Liftings (Terminal Balance) bbls			Terminal/Fiscal Data bbls		
STERLING	2,958,178		STERLING	2,957,782	2,592,822 -364,960
NNPC			NNPC		365,000 365,000
	2,958,178			2,957,782	2,957,822 40
			Lifting Differences (TER. Vs Coy) bbls		
				396	
Year	Production (NSV)	%			
2012	1,620,804				
2013	3,104,832	↑ 91.561			
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit					
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template					
Shows variances between the companies 2013 Opening Stock-Reconciled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR					
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production					
Data not available at the time of analysis. Respective Entity to provide					
Source: NNPC Crude Production by Stream Template, DPR Reconciled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates					

Observations

- Overall production increased significantly by 91.561% compared to 2012 production volumes
- There were variances in the production volume with DPR and NNPC.

The audit could not reconcile these variances as at the time of reporting.

Facility: Ukpokiti

Location: Offshore

Operator: Shebah E&P Company Limited (SEPCOL)

Production Arrangement: Sole Risk

3rd Party Injector/Concession/Partners: Express Petroleum, Atlas Petroleum & SOGW

UKPOKITI 2013			Operator: ATLAS/EXPRESS/SHEBAH		
Production (P1.02)					
Gross Production	De-watering/Shrinkage	Liquid Passed	Opening Stock from last Audit	Variance	
			228,430		
		0	NNPC Crude Production	variance (DPR - Coy)	
			586,905	-586,905	
Opening Stock 1 Jan 13			DPR Production Crude	variance (DPR - Coy)	
Total Liquid Receipts			756,261	756,261	
De-Water/Shrinkage					
Terminal Adjustments					
Liftings			Calculated Closing Stock	variance	
Closing Stock				0	
Liftings (Terminal Balance) bbls			Terminal/Fiscal Data bbls	Liftings (DPR) bbls	ariance (Coy vs DPR)
ATLAS			ATLAS	616,686	-616,686
EXPRESS			EXPRESS	68,000	-68,000
	0			684,686	0
			Lifting Differences (TER. Vs Coy) bbls		
				-684,686	
Year	Production (NSV)	%	PRODUCTION CONTRIBUTION (NSV)		
2012	509,177	?	TERMINAL OPERATOR DPR		
2013			ATLAS		414,425
			EXPRESS		341,836
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit					
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template					
 Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR					
 Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production					
 Data not available at the time of analysis. Respective Entity to provide					
Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates					

Atlas/Express operators of this facility did not populate/return template for Terminal balance operations neither did they provide signed reconciled Production, Terminal receipts and export volumes with DPR.

All attempts to get them to comply proved abortive.

Facility: Usan

Location: Offshore

Operator: Total E&P Nigeria

Production Arrangement: Production Sharing Contract (PSC)

3rd Party Injector/Concession/Partners: Chevron, ESSO & Nexen Petroleum Nigeria

USAN 2013			Operator: TEPNG			
Production (P1.02)			Opening Stock from last Audit			
Gross Production	De-watering/Shrinkage	Liquid Passed	Opening Stock from last Audit	Variance		
39,184,610	0	39,184,610	431,081	129,401		
		39,184,610	NNPC Crude Production variance (DPR - Coy)			
			39,214,610	-30,000		
Opening Stock 1 Jan 13	560,482		DPR Production Crude variance (DPR - Coy)			
Total Liquid Receipts	39,184,610		39,191,544	6,934		
De-Water/Shrinkage	0					
Terminal Adjustments	0					
Liftings	38,357,661		Calculated Closing Stock variance			
Closing Stock	1,450,364		1,387,431	62,933		
Liftings (Terminal Operator) bbls			Liftings (Lifting Coy) bbls			
NNPC	4,539,012		NNPC	4,539,012		
TEPNG	5,987,429		TEPNG	5,987,429		
ESSO	10,884,060		ESSO	10,884,060		
CNL	10,990,011		CNL	10,990,011		
NEXEN	5,957,149		NEXEN	5,957,149		
	38,357,661			38,357,661		
				38,357,661		
				0		
Lifting Differences (TER. Vs Coy) bbls						
Year	Production (NSV)	%				
2012	29,373,767					
2013	39,184,610	33.4				
 Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit						
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template						
Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Fiscalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR						
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production						
Data not available at the time of analysis. Respective Entity to provide						
 Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates						

Observations

- Overall production increased significantly by 33.40% compared to 2012 production volumes
- There were variances in the production volume with DPR and NNPC, opening stock and closing stock

The audit could not reconcile these variances as at the time of reporting.

Facility: Yoho

Location: Offshore

Operator: Mobil Producing Nigeria Unlimited (MPNU)

Production Arrangement: Joint Venture (JV)

3rd Party Injector/Concession/Partners:

YOHO 2013		Operator: MPNU		
Production (P1.02)		Opening Stock from last Audit		Variance
Gross Production	De-watering/Shrinkage	Liquid Passed		
25,140,826		0	25,140,826	
			25,140,826	
			NNPC Crude Production	variance (DPR - Coy)
			25,140,826	0
Opening Stock 1 Jan 13	473,406	DPR Production Crude	variance (DPR - Coy)	
Total Liquid Receipts	25,140,826	25,140,803	-23	
De-Water/Shrinkage	0			
Terminal Adjustments	-420			
Liftings	24,969,999	Calculated Closing Stock	variance	
Closing Stock	644,653	643,813	840	
Liftings (Terminal Balance) bbls		Terminal/Fiscal Data bbls	Liftings (DPR) bbls	variance (Coy vs DPR)
MPN	9,718,386	MPN	9,718,386	0
NNPC	15,251,613	NNPC	15,251,613	0
	24,969,999		24,969,999	24,969,999
		Lifting Differences (TER. Vs Coy) bbls		
		0		
Year	Production (NSV)	%		
2012	27,685,619			
2013	25,140,406	10.12		
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit				
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template				
Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Ficalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR				
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production				
Data not available at the time of analysis. Respective Entity to provide				
Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates				

Observations

- Overall production declined by 10.12% compared to 2012 production volumes

The audit found no variances in the individual entities submissions.

Facility: Zafiro

Location: Offshore

Operator: TEPNG (Nigeria) & Mobil (Equatorial Guinea)

Production Arrangement: Joint Venture (JV)

3rd Party Injector/Concession/Partners:

EKANGA ZAFIRO 2013			Operator: TEPNG	
Production (P1.02)			Opening Stock from last Audit	Variance
Gross Production	De-watering/Shrinkage	Liquid Passed	324,577	0
4,104,610	0	4,104,610		
		4,104,610	NNPC Crude Production	variance (DPR - Coy)
			4,029,844	74,766
Opening Stock 1 Jan 13	324,577		DPR Production Crude	variance (DPR - Coy)
Total Liquid Receipts	4,104,610		4,104,610	0
De-Water/Shrinkage	0			
Terminal Adjustments	0			
Liftings	3,937,545		Calculated Closing Stock	variance
Closing Stock	491,642		491,642	0
Liftings (Terminal Operator) bbls		Liftings (Lifting Coy) bbls	Liftings (DPR) bbls	variance (Coy vs DPR)
NNPC	2,942,647	NNPC	2,942,647	0
TEPNG	994,898	TEPNG	994,898	0
	3,937,545		3,937,545	3,937,545 0
		Lifting Differences (TER. Vs Coy) bbls		
			0	
Year	Production (NSV)	%		
2012	4,512,780	9.045		
2013	4,104,610			
Opening Stock from Last Audit = The reconciled Closing Stock between the Auditors and the Operator for 2012 in the Last Audit				
Calculated Closing Stock = The Computed Closing Stock by the Auditor using information provided by the Operator in Terminal Balance Template				
Shows variances between the companies 2013 Opening Stock-Reconcilled 2012 Closing Stock, Company Fiscalised Crude Production-DPR Fiscalised Crude Production, Operators Closing Stock-Auditors Calculated Closing Stock and Lifting Differences between Operator, Company and DPR				
Shows variance between Operators Fiscalised Crude Production-NNPC Fiscalised Crude Production				
Data not available at the time of analysis. Respective Entity to provide				
Source: NNPC Crude Production by Stream Template, DPR Reconcilled Crude Production Template and Company's Terminal Balance/Crude Lifting Templates				

This is a unitized zone jointly operated by TEPNG (60%) and Mobil Equatorial Guinea (40%)

Observations

- Overall production decreased by 9.045% compared to 2012 production volumes
- There was variance in the production volume NNPC.

The audit could not reconcile these variances as at the time of reporting.

8.4.4 Key findings in the reconciliation of Production Data in the records of NNPC to that of DPR

In the course of carrying out validation and reconciliation of Production volumes in the records of NNPC to that of DPR, it was observed that there is a difference of **538,000 bbls** between the records of NNPC and DPR. This volume difference is however lower by about **85%** when compared to the figure of **3,638,412 bbls** recorded in the 2012 audit.

All producing companies attend Curtailment meetings (monthly) to reconcile their production and export volumes with DPR and NNPC. Upon reconciliation of these volumes, all parties are required to sign-off on a data sheet.

We observed that NNPC was not a signatory to the annual reconciled production volumes but signed-off on the annual reconciled export volumes. This anomaly is responsible for the variances observed between the production volumes as reported by NNPC, DPR and the Terminal Operators.

For some terminals, the Audit was able to obtain a complete reconciled sign-off from all respective parties including 3rd party injectors for each terminal while for some terminals the audit only obtained partial or no reconciled positions at all.

Implication

The recurring lack of reconciled positions between the records of NNPC and DPR puts doubt in the integrity of production figures and raises issues of accountability. This also creates differences between audit figures which are based on NNPC records and individual company's position.

Recommendation

NNPC and DPR to ensure timely and periodic reconciliation of production volumes and update records accordingly.

8.4.5 Domestic Lifting

The Federal Government allocates 445,000 bbls/day for domestic crude processing at the local Refineries based on their combined installed capacity. The table below shows Domestic Crude allocation according to COMD's Domestic Crude Sales schedule for 2013.

Table 8.4.5A – PPMC Lifting

PPMC LIFTING (mmbls)	2013
Supply to Refineries	38.293
PPMC Crude Oil Exchange	59.464
Offshore Processing	24.665
Export as Unprocessed PPMC Crude	36.392
A. Total PPMC Lifting	158.814
B. Supposed PPMC Yearly Allocation of 445,000 bpd	162.425
Difference (B-A)	3.610

Domestic crude oil allocation is made-up of Crude oil Supplied to the Refineries, Crude oil used for offshore processing/Swap arrangements and Exported unprocessed crude.

The refineries put together have not been able to refine up to 30% of the Domestic Crude Oil allocation of 445,000 bpd. This has resulted in Alternative production arrangements such as Offshore Processing and Swap in order to meet up with the increasing local demand for refined petroleum products. These arrangements, have so far not been profitable to the government and people of Nigeria even though the corporation (NNPC) insists it's the best option.

The table below shows the percentage of domestic allocation which is refined locally.

Table 8.4.5B – Domestic Crude Allocation Proportion Refined from Total Refinery Delivery

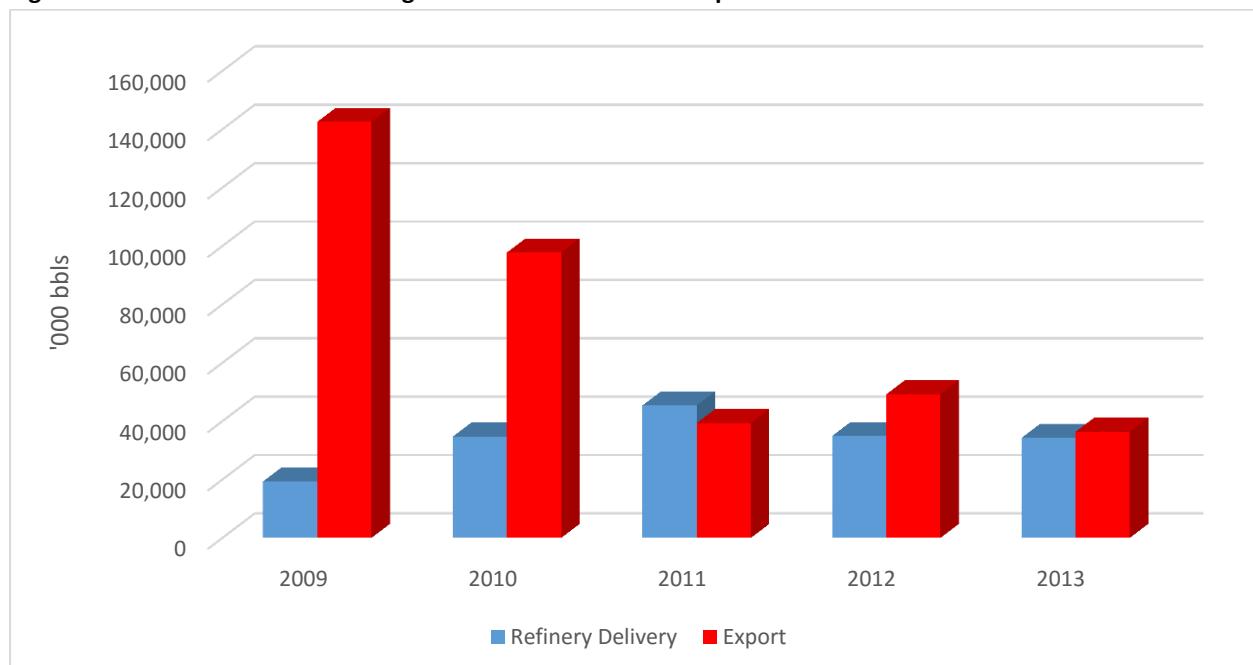
	Domestic Allocation (MBBLS)	Refinery Delivery (MBBLS)	% Refined
2009	161,914	19,363	11.96
2010	166,523	34,703	20.84
2011	164,454	45,394	27.60
2012	162,343	34,927	21.51
2013	158,814	38,293	24.11

The table below gives a summary of the various channels of how the domestic crude oil allocation is utilized. This includes off-shore processing, production and crude exchanges aside the deliveries to local refineries.

Table 8.4.5C – Utilization of Allocated Domestic Crude

	Allocated Crude	Refinery Delivery	Export	Offshore Processing	Crude Exchange	Product Exchange
	Bbl'000	Bbl'000	Bbl'000	Bbl'000	Bbl'000	Bbl'000
2009	161,914	19,363	142,551	-	-	-
2010	166,523	34,703	97,792	27,336	950	5,742
2011	164,454	45,394	39,341	23,688	-	56,032
2012	162,343	34,927	49,214	22,755	-	55,447
2013	158,814	38,293	36,392	24,665	-	59,464

Figure 8.4.5 – Domestic Crude Lifting between Refineries and Export



From the tables above, the refineries were able to refine a total of **38.293 million bbls** in 2013 out of **158.814 million bbls** of the allocated domestic crude; this represents **24.11%** of the total domestic crude allocation.

8.5 Petroleum Products Mass Balance Reconciliation

8.5.1 Product Importation and Distribution

The Nigeria National Petroleum Corporation (NNPC) has four refineries with a design capacity of 445,000 barrels per day. The Federal Government allocates this quantity of crude to NNPC for its domestic liftings.

The crude is pumped through the pipelines from the oil terminals to the refineries Crude-intake tank farms where it is then refined into petroleum products.

The individual refining capacities of the refineries, in barrels per stream day (BPD) are as follows:

Table 8.5.1 - Total Refining Capacity in Nigeria

Refinery	Capacity
Port Harcourt Refining Company (PHRC) – Old	65,000BPD
Port Harcourt Refining Company (PHRC) - New	150,000BPD
Warri Refining and Petrochemical Company Limited (WRPC)	120,000BPD
Kaduna Refining and Petrochemical Company (KRPC)	110,000BPD
Total	445,000 BPD

Source: PPMC

The PHRC old refinery has been moribund for about 20 years but the allocation of 65,000 bbls still continues. The performances of the other three refineries have fallen below designed capacity partly due to aging and inadequate maintenance, necessitating the external sourcing of refined petroleum products to address increasing domestic demand. This alternative production arrangement commenced in 2010 with the introduction of Offshore Processing Arrangement (OPA) with Nigermed and SIR and in 2011 PPMC introduced the SWAP arrangement with four contractors namely;DUKE-OIL AITEO, ONTARIO, TRAFIGURA and TELEVERAS.

The OPA contract with Nigermed was discontinued at the end of 2010 even though THIS WAS THE ONLY CONTRACT with gains. PPMC continued OPA with SIR and SWAP arrangements despite the continual losses recorded in these contracts. The Audit was unable to obtain written explanations from PPMC as to why the Nigermed contract with gains was discontinued while the SIR and Swap contracts with huge losses were retained.

8.5.2 Crude Allocation to Refineries

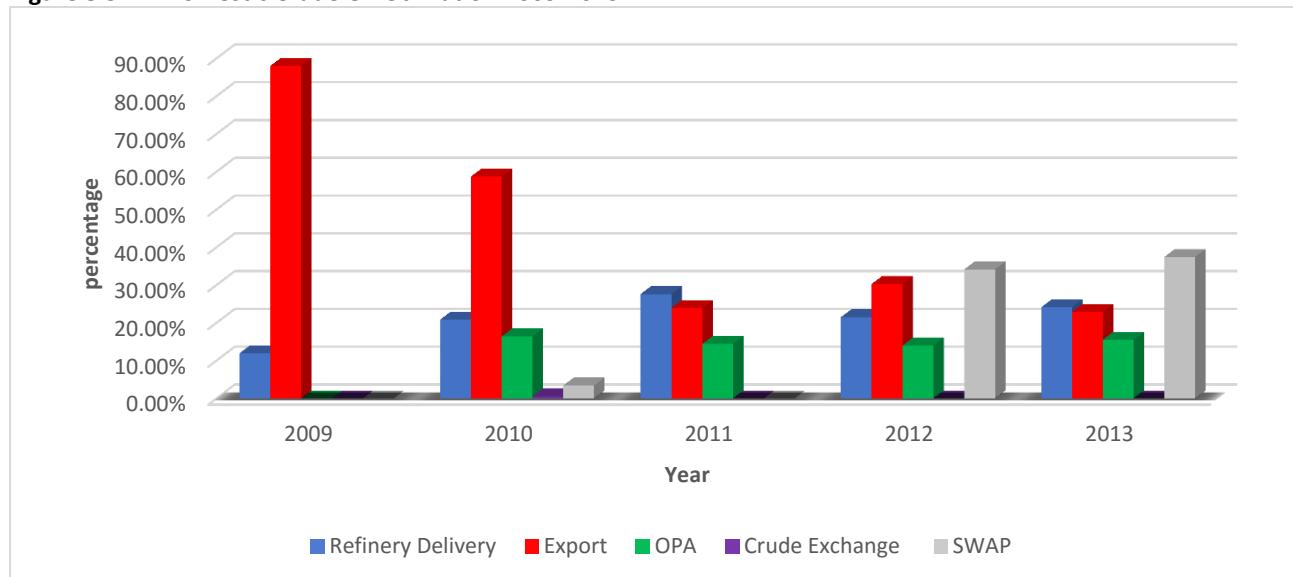
The table below gives a summary of the various channels of how the domestic crude oil allocation is utilized. This includes off-shore processing, production and crude exchanges aside the deliveries to local refineries.

Table 8.5.2 - Summary of Domestic Crude Oil Utilization 2009-2013

	Allocated Crude	Refinery Delivery	Export	OPA	Crude Exchange	SWAP
	Bbl'000	Bbl'000	Bbl'000	Bbl'000	Bbl'000	Bbl'000
2009	161,914	19,363	142,551	-	-	-
2010	166,523	34,703	97,792	27,336	**950	5,742
2011	164,454	45,394	39,341	23,688	-	56,032
Total	492,891	99,458	279,684	51,024	950	61,774
Percentage	100%	20.20%	56.74%	10.35%	0.19%	12.53%
2012	162,343	34,927	49,214	22,755	-	55,447
Percentage	100%	21.51%	30.32%	14.02%		34.15%
2013	158,814	38,293	36,392	24,665	-	59,464
Percentage	100%	24.11%	22.91%	15.53%		37.44%

**In 2010, 950,000 bbls was exchanged for heavy crude for KRPC processing.

Figure 8.5.2 – Domestic Crude Oil Utilization 2009-2013



Based on the 445,000 bpd domestic allocation, the total crude due to PPMC annually is 162,420,000 bbls. In 2013, PPMC was allocated 158,814,000 bbls.

In 2013, a total of 52.97% of the domestic crude allocation was used for OPA and SWAP which shows that the Federation depends mainly on imported refined products for local consumption.

8.5.2.1 Audit issue on Crude Allocation to Refineries

From the above, the refineries capacity utilisation was only **24.11%**, which means in 2013 out of a total allocation of **158.814 million barrels**, only **38.293 million barrels** were processed in the country. The balance of **75.89%** was either processed outside the country or exported by NNPC.

Implication

These arrangements, have so far not been profitable to the government and people of Nigeria even though the corporation (NNPC) insists it's the best option.

Recommendations

- The crude allocation to the NNPC for the refineries should be limited to their current capacity utilisation.
- NNPC should terminate all ad-hoc arrangements involving crude oil exchange barter or off-shore processing and embark on direct crude sales or product purchase.
- The allocation to the old moribund Port Harcourt Refinery should be stopped forthwith.
- As a matter of urgency, the Federal Government through the appropriate agency should set the agenda for the privatisation of the Refineries that are underperforming.

8.5.3 Refinery Balance

The total crude oil allocated to the four refineries at Warri, Kaduna and Port Harcourt is analysed in the tables below to Show Crude intake and Utilisation in tonnage.

Table 8.5.3A - WRPC REFINERY BALANCE MT

CRUDE TYPE	PRODUCTS								
		2012 Closing Stock	Opening Stock	Production	Evacuation	Losses	Closing Stock	Calculated Closing Stock	Variance
ESCRAVOS	OFF GAS								
	LPG	84,340	84,340	77,672	15,672	-	2,837	146,340	143,503
UGHELLI	PMS	24,288	114,556	615,272	723,098	-	58,417	6,730	-51,687
	DPK	16,560	16,560	387,517	381,713	-	22,366	22,364	-2
SLOP	AGO	38,507	38,507	426,349	476,589	-	29,209	-11,733	-40,942
	LPFO	42,122	125,007	567,696	562,110	-	130,576	130,593	17
ASPHALT									
CONSUMPTION									
COKE BURNT									
Losses									
26,675									
There are a little over 7barrels of Crude Oil in a Metric Ton									

Observations:

- There were huge variances in the Closing stock for 2012 as reported by WRPC and the Opening stock of 2013 as reported by WRPC for PMS and LPFO.
- The reported closing stock showed variances with the calculated Closing stock after material balance.
- According to WRPC, “CONSUMPTION” includes Gas, LPG, LPFO and AGO but the Losses of 26,675 MT was not broken down into products.
- WRPC reported that Propane and Butane counters were faulty; this resulted in 2,837 MT differences. The Audit could not verify these claims.
- WRPC did not provide the Audit with the Crude intake volumes.

Table 8.5.3B - KRPC Refinery Balance (Crude Material Balance) MT

	OPENING STOCK	RECEIPT	PROCESSED	CLOSING STOCK	AUDIT CLOSING STOCK	VARIANCE
ESCRAVOS	20,393	939,530	990,930	31,506	(31,007)	62,513
URALS	15,237	-	-	15,237	15,237	-
UGELLI BLEND	95,687	556,436	545,221	35,160	106,902	(71,742)
SLOP	7,513	46,208	55,718	9,912	(1,997)	11,909

Table 8.5.3C - KRPC Refinery Balance (Products Material Balance) MT

PRODUCTS	2012 Closing Stock	Opening Stock	Production	Evacuation	Losses	Closing Stock	Calculated Closing Stock	Variance
OFF GAS								
LPG	84	84	-	-	-	84	84	-
PMS	11,509	11,509	395,532	393,080		10,877	13,961	3,084
DPK	6,110	6,111	200,362	192,107	-	14,720	14,366	(354)
AGO	8,532	8,532	321,476	317,036	-	11,444	12,972	1,528

PRODUCTS	2012 Closing Stock	Opening Stock	Production	Evacuation	Losses	Closing Stock	Calculated Closing Stock	Variance
LPFO	11,019	11,019	336,719	331,106	-	15,515	16,632	1,117
ASPHALT	15,248	15,248	(5,289)	2,667	-	6,627	7,292	665
KERO-SOLVENT	881	467	(1,158)	948	-	216	(1,639)	(1,855)
INTERMEDIATE PRODUCT	237,492	216,308	24,778	167,397	-	194,197	73,689	(120,508)
INTERNAL CONSUMPTION	3,438	890	234,903	233,255	-	2,538	2,538	-
KRPC recorded a total production loss of 82,230 MT . This was not broken down by products.								

Observations:

- There were huge crude stock imbalances. The Operators provided no reasons for this.
- KRPC had a total available crude stock of 1,681,004 MT of which 1,542,174 MT was crude received.
- KRPC refined a total of 1,591,869 of its available crude.
- They were material imbalances for the refined products. The operator gave no reason for these imbalances.
- KRPC recorded a total production loss of 82,230 MT. This was not broken down by products.

Table 8.5.3D - PHRC Refinery Balance (Crude Material Balance) MT

	OPENING STOCK	RECEIPT	PROCESSED	CLOSING STOCK	AUDIT CLOSING STOCK	VARIANCE
BONNY LIGHT	91,197	973,019	1,034,428	32,142	29,788	2,354

Table 8.5.3E - PHRC Refinery Balance (Products Material Balance) MT

PRODUCTS	2012 Closing Stock	Opening Stock	Production	Import/ Blend Component	Evacuation	Losses	Closing Stock	Calculated Closing Stock	Variance
OFF GAS									
LPG	30,759	30,759	18,989	-	10,674	-	39,074	39,074	-
PMS	127,248	127,248	335,701	309,523	662,463	-	110,008	110,009	1
DPK	31,915	31,914	137,369	-	156,145	-	13,138	13,138	-
AGO	84,873	84,873	167,155	4,383	235,917	-	20,494	20,494	-
FUEL OIL	226,518	226,518	211,528	37,379	333,626	-	141,799	141,799	-
KRPC recorded a total production loss of 163,686 MT . This was not broken down by products.									

Observations:

- PHRC had a total available crude stock of 1,064,216 MT of which 973,019 MT was crude received.
- PHRC refined a total of 1,034,428 of its available crude.
- Available product for evacuation was made up of refined products and importedblend component products.
- PHRC recorded a total production loss of 163,686 MT. This was not broken down by products.

8.5.4 Export Sales

Intermediate products from the refinery such as Naphtha, Long Residue, Low and High Pour Fuel Oil are exported by NNPC. The quantities of Naphtha, LPFO, HPFO and LR exported from 2009-2013 are shown in table below:

Table 8.5.4 - Summary of Products Export Sales (2009-2013)

	2009	2010	2011	2012	2013
Product	Qty (Mt)				
Naphtha	277,466.16	358,248.43	525,181.15	356,639.24	413,768.81
LPFO	209642.926	548,257.37	599,243.91	294,925.36	755,072.08
Long Residue	117467.4	-	-	-	-
HPFO	210,461.35	100,542.60	336,486.99	119,660.98	

The table above shows significant increase in the exported volumes of these intermediary products in 2013. The increase in these exported volumes is a reflection of the decline in industrial activities in the country as these products could be used as fuel for the local industries. This increase is also attributed to poor performance of our refineries as these products could be processed to petroleum products and generate more internal revenue.

8.5.5 Alternative Production Arrangements

In 2010, PPMC initiated an arrangement to augment shortfall in supply of refined products called “Offshore Processing Arrangement (OPA)”. According to PPMC, this was necessary as the local refineries production could not meet the daily local demands of white fuels. In 2011, PPMC further introduced SWAP arrangement to increase the availability of white fuels in the country. These contracts are carried out with the unrefined crude from the domestic allocation of 445,000 bpd and records over-the-years have shown that these arrangements are not beneficial.

This audit requested explanation from PPMC for sustaining a contract that was clearly a “loss” to the federation and below is an extract of PPMC’s explanation of the process involved in OPA and SWAP.

“...in order to mitigate the price vulnerability, shortages in products availability and guarantee of nationwide steady supply while at the same time freeing cash for other expenditures, NNPC sought and obtained approval to enter into Crude Oil Offshore Processing Arrangement (OPA) with Societe Ivoirienne de Raffinage (S.I.R.); and Crude Oil/Product Exchange Arrangement (SWAP) with Messrs Trafigura Beheer B.V and Duke Oil Company Incorporated (a fully owned subsidiary of NNPC). Under the OPA arrangement, NNPC delivers nominated Crude Oil grade to S.I.R. for processing and subsequent delivery of the products to NNPC. In the execution of the programme two sets of operational costs are incurred by NNPC, i.e. costs associated with the Crude Oil Supplies – processing fee, freight and demurrage; and costs associated with the Products Deliveries –freight and demurrage.

For the Products Deliveries, NNPC receives PMS, DPK and AGO (as required) in parcels of 30,000 to 60,000MT; while others - LPG, LPFO, VGO, Butane, Propane (referred to as Retained products in the contract) not required by NNPC are sold and proceeds remitted to NNPC’s account.

Reconciliation meetings are held between NNPC and S.I.R. to determine the quantities of Crude Oil supplied, the Refined products received and also the value of the Retained products. Any position arrived at the end of each reconciliation meeting will be offset in the next cycle of transactions. The transaction therefore is an on-going account, i.e. until such a time that the contract is terminated and the final net positions ascertained.

NNPC made agreements with Societe Ivoirenn De Raffinage, (SIR) and Nigermmed and others for processing some quantities of the crude oil offshore. Part of the refined products such as PMS, AGO and DPK are returned whilst LPG, VGO and Fuel Oil (LPFO and HPFO) are retained and paid for at a negotiated price.

Crude SWAP is a Value for Value arrangement where the operators deliver corresponding net product value, i.e. inclusive of demurrage cost, to the net value derived from the Crude Oil loaded, i.e. exclusive of associated costs - demurrage. Thus, the arrangement encompassed all costs (Crude Oil, Products and associated costs), thereby relieving NNPC of the burden of cash payment.

Therefore, an over delivery means PPMC owes the party the value in Crude Oil, while an under delivery means the other party owes PPMC the value in refined products; thus, either party is under obligation to settle the over/under delivery in subsequent transactions. Accordingly, any difference between the value of Crude Oil and that of refined products delivered are not construed as a net gain or loss, instead the balance is taken as either over delivery or under delivery.

Keeping in line with the above, periodic account reconciliation is carried out to ascertain each Party's position and overall status of the programme. This is an on-going transaction and NOT a financial loss or gain to the Corporation."

Observations:

- PPMC entered into OPA contract in 2010 with two companies (S.I.R and Nigermed). The contract with Nigermed was discontinued at the end of 2010 even though it returned gains to the Corporation while that of S.I.R with a steady loss is continued. PPMC was not able to provide explanations for this.
- PPMC said that these transactions are reconciled every two months to net-off the differences with respect to under/over delivery. The under/over delivery are supposed to be settled in subsequent transactions. The Audit observed that if this was the case then how come these contracts have always recorded losses from 2010 up to the period under review (2013).
- In OPA, where PPMC estimates the value of returned product as Cost, Insurance and Freight (CIF), the Audit estimates this value as Free on Board (FOB). This is so as all associated costs in these transactions (outgoing crude, refining and returning white fuels) are borne by PPMC.

The summary of Offshore Processing Arrangement for 2013 is shown below:

Table 8.5.5A - Summary of 2013 OPA (PPMC-SIR)

VOLUME (BBLS)	VALUE (\$)	FREIGHT (\$)	DEMURRAGE (\$)	PROCESSING FEE (\$)	TOTAL (\$)
20,865,385	2,266,594,678.87	37,432,465.23	155,192.20	52,163,462.50	2,356,345,798.80
RETURNED PRODUCTS					
					-
PMS (MT)					1,732,677,248.590

622,194.476	609,933,022.840	19,638,854.57	9,804,259.370		
DPK (MT)					
1,137,657.336	1,122,744,225.750	31,519,862.07	16,181,009.55		
RETAINED PRODUCTS					
LPG					
49,215.593	38,226,564.710				
FUEL OIL					
268,271.899	168,260,801.030				
VGO					
270,855.490	188,163,989.630				
Net Difference (Loss)					(306,161,180.40)

The summary of Offshore Processing Arrangement (OPA) from 2010-2013 is shown below:

Table 8.5.5B - Summary of Products Imported between NNPC, Nigermed and SIR Processing Arrangements

	NIGERMED 2010	SIR 2010	SIR 2011	SIR 2012	SIR 2013
CRUDE VOLUME (BBLS)	21,758,018	5,578,618	24,636,392	24,657,100	20,865,385
CRUDE VALUE (\$)	1,738,569,282.00	496,255,654.00	2,787,176,618.00	2,750,815,143.38	2,266,594,678.87
TOTAL PRODUCT VALUE (\$)	1,729,543,657.76	452,790,436.00	2,015,312,141.93	2,304,133,161.07	1,732,677,248.59
RETAINED PRODUCT VALUE (\$)	197,590,015.73	83,360,570.00	518,600,077.33	523,877,525.39	394,651,355.37
OTHER COST (\$)	116,853,236.00	48,273,619.00	176,182,885.00	212,988,862.02	166,895,105.49
NET GAIN/LOSS	71,711,155.49	(8,378,267.00)	(429,447,283.74)	(135,793,318.94)	(306,161,180.40)

From the above table, “Other cost” are costs borne by PPMC apart from the value of the Crude Oil and it includes; Crude Oil Freight, Crude Oil Processing Fee at S.I.R facility, Demurrage on Crude Oil, Freight for Returned Products and Demurrage associated with Returned Products.

PPMC could not provide explanation for discontinuing the contract with Nigermed which was profitable in 2010 in favour of S.I.R. despite the huge losses in revenue recorded in the various S.I.R transactions

8.5.6 Swap Arrangement

In order to avoid scarcity of petroleum products in the country, PPMC signed a barter (value-for-value) contracts with Trafigura Beheer B.V and Duke Oil in 2011. The contract with Trafigura was initially signed on 1st October, 2010 and later renewed on 1st October 2011 to terminate on 31st December 2014.

Basically, this is an arrangement for the exchange of crude oil for refined petroleum products. The following arrangements were in place during the period covered by this audit:

- PPMC/Duke Oil-Taleveras-Crude Oil – Refined Products Exchange Agreement; February - December 2011.
- PPMC/Duke Oil-AITEO Crude Oil – Refined Product Exchange Agreement; February – December 2011.
- PPMC/Duke Oil-Ontario-Crude Oil - Refined Products Exchange Agreement; February - December 2011
- PPMC/Trafigura Crude Oil-Refined Product Exchange Agreement - Liftings and Deliveries; October -December 2010.
- PPMC/Trafigura Crude Oil - Refined Product Agreement- Liftings and Deliveries; January – December 2011.

In 2013, the following transactions took place in accordance with the subsisting agreement.

Table 8.5.6A - Summary of Swap Arrangement in 2013

CRUDE OIL-REFINED PRODUCT EXCHANGE ARRANGEMENT 2013							UNDER-DELIVERY
PPMC-TRAFIGURA	CRUDE OIL		PRODUCT				
	QUANTITY (BBLS)	VALUE (\$)			QUANTITY (MT)	VALUE (\$)	DEMURRAGE (\$)
CRUDE OIL	22,409,423.00	2,492,571,693.30		PMS	1,375,138.52	1,495,887,143.06	19,939,800.04
				DPK	936,357.11	1,017,862,899.91	12,472,838.72
DEMURRAGE		215,600.41					
TOTAL	22,409,423.00	2,492,571,693.30		TOTAL	2,311,495.63	2,513,750,042.97	32,628,239.17
CRUDE OIL-REFINED PRODUCT EXCHANGE ARRANGEMENT 2013							
PPMC-TELEVERAS	CRUDE OIL		PRODUCT				UNDER-DELIVERY
	QUANTITY (BBLS)	VALUE (\$)			QUANTITY (MT)	VALUE (\$)	DEMURRAGE (\$)
CRUDE OIL	12,344,494.00	1,354,588,696.17		PMS	1,062,671.10	1,140,516,909.64	16,703,035.98
DEMURRAGE		-		DPK	137,766.43	150,219,708.14	2,002,277.98
TOTAL	12,344,494.00	1,354,588,696.17					
				TOTAL	1,200,437.53	1,290,736,617.78	18,705,313.96
CRUDE OIL-REFINED PRODUCT EXCHANGE ARRANGEMENT 2013							
PPMC-AITEO	CRUDE OIL		PRODUCT				UNDER-DELIVERY
	QUANTITY (BBLS)	VALUE (\$)			QUANTITY (MT)	VALUE (\$)	DEMURRAGE (\$)
CRUDE OIL	11,401,455.00	1,248,306,845.75		PMS	1,116,547.75	1,178,312,641.61	9,841,895.38
DEMURRAGE		146,001.41					
TOTAL	11,401,455.00	1,248,306,845.75					
				TOTAL	1,116,547.75	1,178,312,641.61	9,987,896.79
CRUDE OIL-REFINED PRODUCT EXCHANGE ARRANGEMENT 2013							
PPMC-ONTARIO	CRUDE OIL		PRODUCT				UNDER-DELIVERY
	QUANTITY (BBLS)	VALUE (\$)			QUANTITY (MT)	VALUE (\$)	DEMURRAGE (\$)
CRUDE OIL	11,498,231.00	1,268,573,236.94		PMS	1,024,335.28	1,092,011,313.91	16,186,612.48
				DPK	144,908.44	156,038,748.24	1,111,112.50
DEMURRAGE		76,377.31					
TOTAL	11,498,231.00	1,268,573,236.94		TOTAL	1,169,243.72	1,248,050,062.15	17,374,102.29
OVERALL COST INCURRED BY PPMC FOR PRODUCT EXCHANGE				6,442,736,024.37			
OVERALL PRODUCT VALUE TO PPMC FOR PRODUCT EXCHANGE				6,230,849,364.51		GROSS UNDER-DELIVERY (LOSS)	(211,886,659.86)

The summary of SWAP Arrangement from 2010-2013 is in the table below

Table 8.5.6B – Summary of SWAP Arrangements from 2010-2013

PPMC-TRAFIGURA	2010	2011	2012	2013
CRUDE VOLUME (BBLS)	6,691,206	24,489,415	20,494,470	22,409,423
CRUDE VALUE (\$)	613,769,368.00	2,790,349,514.00	2,358,352,598.00	2,492,571,693.30
TOTAL PRODUCT VALUE (\$)	628,012,134.00	2,678,811,353.00	2,313,730,540.05	2,513,750,042.97
OTHER COST (\$)	14,897,206.00	62,248,439.00	28,811,608.40	32,628,239.17
NET GAIN/LOSS	(654,440.00)	(173,786,600.00)	(73,433,666.35)	(11,449,889.50)

PPMC-TELEVERAS	2011	2012	2013
CRUDE VOLUME (BBLS)	10,178,140	14,026,372	12,344,494
CRUDE VALUE (\$)	1,179,283,683.00	1,521,439,547.95	1,354,588,696.17
TOTAL PRODUCT VALUE (\$)	1,147,083,749.00	1,549,534,908.43	1,290,736,617.78
OTHER COST (\$)	20,108,944.00	28,069,522.30	18,705,313.96
NET GAIN/LOSS	(52,308,878.00)	25,838.18	(82,557,392.35)

PPMC-AITEO	2011	2012	2013
CRUDE VOLUME (BBLS)	10,231,122	10,496,582	11,401,455
CRUDE VALUE (\$)	1,170,302,024.00	1,222,080,928.40	1,248,306,845.75
TOTAL PRODUCT VALUE (\$)	1,100,373,508.00	1,259,744,737.68	1,178,312,641.61
OTHER COST (\$)	23,118,074.00	17,351,550.52	9,987,896.79
NET GAIN/LOSS	(93,046,590.00)	20,312,258.76	(79,982,100.93)

PPMC-ONTARIO	2011	2012	2013
CRUDE VOLUME (BBLS)	10,184,750	10,430,838	11,498,231
CRUDE VALUE (\$)	1,183,099,016.00	1,174,887,505.72	1,268,573,236.94
TOTAL PRODUCT VALUE (\$)	1,002,820,284.00	1,137,681,890.50	1,248,050,062.15
OTHER COST (\$)	-	16,951,130.99	17,374,102.29
NET GAIN/LOSS	(180,278,732.00)	(54,156,746.21)	(37,897,277.08)

From the above table, “Other cost” are costs borne by PPMC apart from the value of the Crude Oil and it includes; Demurrage on Crude Oil and Demurrage associated with Products.

There is no cost efficiency in the transactions between NNPC and its Offshore Processing partner (SIR) and its SWAP partners (Trafigura and Duke Oil). This is because when the total cost of offshore processing consisting of cost of crude, processing fees, freight and demurrage (if applicable) are compared with the reported value of returned products (PMS, DPK, AGO) and the retained products proceeds received by NNPC, the transactions are not economically beneficial.

The table below shows the variances in the reported volumes of Crude Oil used for OPA and SWAP by COMD and PPMC in 2013. There was a variance 5.610 million bbls that could not be reconciled.

Table 8.5.6C - Crude Allocation Volumes

TOTAL ALLOCATED CRUDE VOLUMES			
000 bbls	COMD Records	PPMC OPA/SWAP Record	Variance
OPA Volume	24,665	20,865	3,800
SWAP Volume	59,464	57,654	1,810
Total	84,129	78,519	5,610

Table 8.5.6D - Summary of losses on Product Exchange (SWAP) and Off-Shore Processing Arrangement in 2013

ARRANGEMENT	NET LOSS/GAIN (\$)
SWAP Arrangement	(\$211,886,659.86)
Offshore processing arrangement (OPA)	(\$306,161,180.40)
TOTAL	(\$518,047,840.26)

8.5.6.1 Audit Issues on Swap and OPA Arrangements

- I. There were variances in the reported volumes of Crude Oil used for OPA and SWAP by COMD and PPMC in 2013 to the tune of **5.610 million bbls** which could not be reconciled.
- II. The total value of losses to NNPC on the Off-shore processing transactions and SWAP arrangements in 2013 were in the sum of **\$306,161,180.40** and **\$211,886,659.86** respectively.

Implication

Loss of revenue to the Federation to the tune of **\$518,047,840.26**

Recommendation

NNPC should discontinue these alternative arrangements altogether and in its place, limit itself to exportation of crude oil and importation of refined petroleum products.

NNPC Response

In line with the Offshore Processing Agreement and Crude Oil Refined Products Exchange Agreement each Crude Oil cargo is tied to corresponding refined Products delivered irrespective of the date the Crude Oil is loaded. The purpose is to enable us match every Crude Oil loaded with Products delivered. It is also to ascertain the performance of the Operators in line with the contract.

However, COMD reports Crude Oil loading for the year without matching it to refined Products delivered.

It is important to note that the differences observed in Table 8.10.6C above were due to the method of recording the information.

In view of the above, we reiterate that all the Crude Oil volumes were recorded in our reports.

8.5.7 Coastal and Marine Shipments

Coastal and Marine shipment operations in PPMC started in the late 90's, with the liberalization of the downstream sector of the Petroleum industry, which saw DPR licensing some companies to construct and operate Petroleum products storage Depots in the Coastal areas.

The intention was to complement the distribution efforts of NNPC/PPMC following the advent of product pipeline vandalism and epileptic performance of the nation's refineries in order to ensure product availability nationwide.

At the time, PPMC operated an expansive fleet of Coastal vessels with which it distributed products to the various Major Marketers and DAPP MAN storage facilities upon product allocation and payment confirmation.

Following the expansion of the market from Lagos and thereafter Port Harcourt, Calabar and Warri resulting in increased number of storage facilities, PPMC became overwhelmed by the delivery challenges occasioned by the multiple deliveries/locations, and therefore, resorted to encouraging the marketers to provide their own vessels for cargo receipt and onward delivery to their storage facilities. This was later followed by the creation of the PPPRA Petroleum Product Pricing Template which provided the segmented margins, showing a calculation of the expected landing costs of all petroleum products and approving specific rates to be applied to each stakeholder along the chain of distribution.

MERITS:

The merits of Coastal and Marine Shipments include;

- Bulk sales of Petroleum products to Storage facilities in order to complement the distribution efforts of NNPC/PPMC depots nationwide.
- Cash and Carry transactions which ensure immediate payment for products before delivery.
- Increased availability of petroleum products nationwide due to bulk product allocation to storage facilities owned by DAPPMAN members.
- Reduction of the strain of bridging on NNPC/PPMC Depots nationwide.
- Evacuation of Refinery Depots to ensure ullage and avoid untimely shutdown of the Refinery.

DEMERITS:

- Removes focus from the need to restore the integrity of the NNPC/PPMC pipelines for use in product movement to all the NNPC/PPMC Depots nationwide

CHALLENGES:

- Inadequate product stock to meet up with the demand by Coastal Marketers, due to the incessant vandal activities which affect Refineries operations.
- Non-dredging of jetties by NPA which limits the size of vessels for product discharge/deliveries
- Shortage of shuttle vessels to expedite Ship-to-Ship transhipment operations, leading to huge cost in demurrage.
- Aged vessels resulting in frequent rejection of shuttle vessels by Mother Vessels resulting in high demurrage cost on PPMC.
- Activities/inactivities of other Government Agencies in Coastal/Marine operations.

The distribution of petroleum products within the coastal areas of Port Harcourt, Warri and Calabar is as summarized below.

Table 8.5.7 - Summary of Coastal Liftings

SUMMARY OF COASTAL LIFTINGS IN 2013		
PRODUCT	VOLUME (MT)	VOLUME (LTS)
AGO	43,961.92	51,001,888.00
DPK	2,240,221.60	2,774,104,216.00
PMS	443,266.64	599,152,447.00

Source: PPMC

8.5.8 Pipeline Movements

There are twenty-two depots located at strategic towns across the country to enhance the storage and distribution of petroleum products to the populace.

The data obtained from PPMC shows that only nine depots were active, namely; Atlas Cove, Mosimi, Satellite, Ibadan, Ilorin, Ore, Warri, Gombe and Kaduna.

The Mosimi Area, which is the most active during the period is made up of the Atlas Cove, Mosimi, Satellite, Ibadan, Ilorin and Ore.

Pipeline movement experienced losses during the period under consideration Details are as shown in the table below:

Table8.5.8A - Summary of Pipeline Product Movement (Overall Product Losses via Pipeline)

Product	Dispatched (MT)	Received (MT)	Variance (MT)
PMS	3,746,190	3,436,570	(309,620)
DPK	49,994	47,418	(2,576)
AGO	340,607	306,117	(34,490)

A breakdown of the above losses as experienced in the different operational areas is shown below:

Table8.5.8B - Summary of Pipeline Product Movement (Mosimi Area)

Product	Dispatched (MT)	Received (MT)	Variance (MT)
PMS	3,325,704	3,061,896	(263,808)
DPK			
AGO	42,162	38,827	(3,335)

Table8.5.8C - Summary of Pipeline Product Movement (PH Area)

Product	Dispatched (MT)	Received (MT)	Variance (MT)
PMS	123,800	124,560	760
DPK	23,325	22,343	(982)
AGO	52,652	51,118	(1,534)

Table8.5.8D - Summary of Pipeline Product Movement (Warri Area)

Product	Dispatched (MT)	Received (MT)	Variance (MT)
PMS	124,842	108,691	(16,151)
DPK	26,669	25,075	(1,594)
AGO	98,074	96,836	(1,238)

Table 8.5.8E - Summary of Pipeline Product Movement (Kaduna Area)

Product	Dispatched (MT)	Received (MT)	Variance (MT)
PMS	150,889	130,600	(20,289)
DPK			
AGO	111,727	99,752	(11,975)

Table 8.5.8F - Summary of Pipeline Products Movement (Gombe Area)

Product	Dispatched (MT)	Received (MT)	Variance (MT)
PMS	20,955	10,823	(10,132)
DPK			
AGO	17,996	9,792	(8,204)

Source: PPMC Pipeline Movement 2013 Template

Conversion

1 MT = 1,356.4471935108 Litres for liquid of 737.22 kg/m³ for PMS

1 MT = 1,223.7655265251 Litres for liquid of 817.5 kg/m³ for HHK

1 MT = 1,129.9435025249 Litres for liquid of 885 kg/m³ for AGO

There was a total loss of 309,620 MT of PMS equivalent to 419,983,180 Litres estimated at ₦40.78 billion (@ ₦97 per litre). Mosimi area recorded the highest loss of 263, 808 MT which could be attributable to pipeline vandalism between Atlas Cove and Mosimi and evaporation due to non-installation of internal floating roof covers. Overall losses for AGO and DPK was 34,490 MT and 2,576 MT respectively.

The audit also observed that there was no pipeline movement for DPK in the Mosimi, Kaduna and Gombe areas. The percentage loss for PMS was 8.265%. The normal losses for such operations are between 0.5% - 1%. These abnormal losses reported are a reflection of the theft, pipeline vandalism and poor maintenance culture.

NNPC should strengthen its security network of pipeline infrastructure as well as its storage facilities to enable smooth product movement.

8.5.8.1 Product Movements and Depot Balances

By design, refined products are transferred from one depot to another through pipelines. Over the years, transfer of products through pipelines have significantly reduced due to pipeline vandalism. The summary of the petroleum products (PMS, DPK & AGO) discharged at the various depots are shown in tables below:

Table 8.5.8.1A - Summary of Depot Balances for PMS in Metric Tons

DEPOT BALANCES FOR AGO 2013 (MT)											
	CLOSING STOCK AS REPORTED BY LAST AUDIT	CLOSING STOCK AS REPORTED BY PPMC FOR 2012	2013 OPENING STOCK	RECEIPTS	DE-WATER/ TO SLOP	SALES/ TRANSFERS OUT	OTHERS	CLOSING STOCK	UNACCOUNTED LOSSES	CALCULATED CLOSING STOCK	CLOSING STOCK VARIANCE
ATLAS COVE	9,448.82	9,448.82	9,448.82	42,533.88		42,162.36	1,482.64	8,589.68	251.98	8,085.72	503.96
WARRI	(396.00)	-	0.00	334,454.00		334,454.00	0.00			0.00	0.00
CALABAR	5,901.46	5,901.46	5,901.00	14,173.00	392.00	12,986.94		6,694.00		6,695.06	-1.06
MOSIMI	17,107.12	15,971.92	15,971.92	38,827.28		42,133.12	1,143.70	11,635.80		11,522.38	113.42
SATELLITE	560.72	550.40	550.40				161.38	388.72		389.02	-0.30
IBADAN	4,477.16	4,477.16	3,930.53			755.00	165.35	2,742.92		3,010.19	-267.27
ILORIN	352.60	352.60	352.60					352.60		352.60	0.00
BENIN	8,650.00	8,653.00	8,653.00	99,040.00	10,740.00	91,659.00		5,241.00	287.00	5,007.00	234.00
ORE	604.58	604.58	604.58				3.44	601.14		601.14	0.00
SULEJA	2,247.00	2,253.00	2,253.00	43,549.00		30,059.00		16,355.00	630.00	15,113.00	1,242.00
MINNA	2,849.00	2,857.00	2,857.00	17,517.00		7,726.00		12,433.00	214.00	12,434.00	-1.00
KADUNA	(530.00)	(45.00)	0.00	317,034.00		308,084.00		8,373.00	577.00	8,373.00	0.00
JOS	11,083.00	11,083.00	11,083.00	20,286.00		20,816.00		8,388.00	2,165.00	8,388.00	0.00
GOMBE	812.00	812.00	812.00	9,792.00		2,785.00		5,566.00	2,393.00	5,426.00	140.00
MAIDUGRI	1,340.00	1,324.00	1,324.00					1,324.00		1,324.00	0.00
PH	2,582.65	2,583.00	2,583.00	86,434.00	14.00	89,036.00		1,112.00		-33.00	1,145.00
ABA	22,405.67	22,405.56	22,406.00	54,115.00	794.00	73,035.00		2,691.00		2,692.00	-1.00
ENUGU	3,435.24	3,435.37	3,435.00			33.00		3,402.00		3,402.00	0.00
MKD	-									0.00	0.00
YOLA	1,447.00	1,447.00	1,447.00					1,447.00		1,447.00	0.00
GUSAU	5,533.00	5,564.00	5,564.00			2,672.00		3,200.00	105.00	2,787.00	413.00
KANO	22,640.00	22,642.00	20,822.00	12,715.00		27,482.00		6,023.00	46.00	6,009.00	14.00
3RD PARTY	(17.56)	(17.00)								0.00	0.00
TOTAL			119,998.85	1,090,470.16	11,973.00	1,085,845.42	2,956.51	106,559.86	6,668.98		

I MT = 1,129.9435028249 liters for Liquid of 885 kg/m³ for AGO

Source: PPMC Depot balance Templates

Table 8.5.8.1B - Summary of Depot Balances for DPK in Metric Tons

DEPOT BALANCES FOR PMS 2013 (MT)											
	CLOSING STOCK AS REPORTED BY LAST AUDIT	CLOSING STOCK AS REPORTED BY PPMC FOR 2012	2013 OPENING STOCK	RECEIPTS	De-WATER	SALES/ TRANSFERS OUT	OTHERS	CLOSING STOCK	UNACCOUNTED LOSSES	CALCULATED CLOSING STOCK	CLOSING STOCK VARIANCE
ATLAS COVE	23,080.35	26,216.62	26,216.62	2,227,932.52		2,231,783.02	411.48	21,782.51	323.15	21,631.49	151.02
WARRI	-372.00	0.00	0.00	268,884.00		268,884.00		0.00		0.00	0.00
CALABAR	2,978.01	2,978.01	2,978.00	112,832.00		110,174.00	532.00	6,162.00		5,104.00	1,058.00
MOSIMI	30,377.43	23,543.17	23,543.17	1,610,204.36		1,593,706.85	3,520.59	41,337.01	45.30	36,474.78	4,862.22
SATELLITE	3,373.34	3,719.13	3,719.13	492,261.51		492,722.82		3,273.68	17.38	3,240.44	33.24
IBADAN	8,450.72	8,973.18	8,973.18	723,934.77		219,065.02	440.94	13,869.35	65.69	513,336.30	-499,466.95
ILORIN	3,039.63	3,643.63	3,643.63	137,352.62		130,140.11	365.42	10,046.03	828.24	9,662.48	383.55
BENIN	18,249.00	18,249.00	18,249.00	113,060.00	3,076.00	108,910.00		19,134.00	313.00	19,010.00	124.00
ORE	2,489.99	2,619.85	2,619.85	98,143.21		92,920.87	585.13	7,757.63	17.37	7,239.69	517.94
SULEJA	5,363.00	5,064.00	5,064.00	56,520.00		262,874.00		25,375.00	1,678.00	-202,968.00	228,343.00
MINNA	2,832.00	3,078.00	3,078.00	9,919.00		6,033.00		6,238.00	59.00	6,905.00	-667.00
KADUNA	-667.00	0.00	0.00	393,108.00		384,032.00		0.00	671.00	8,405.00	-8,405.00
JOS	22,887.00	22,907.00	22,907.00	24,819.00		23,847.00		20,870.00	3,009.00	20,870.00	0.00
GOMBE	3,576.00	3,584.00	3,584.00	10,823.00		1,633.00		10,141.00	2,633.00	10,141.00	0.00
MAIDUGRI	411.00	411.00	411.00					411.00		411.00	0.00
PH	2,132.85	2,132.85	2,133.00	325,789.00	294.00	331,023.00		1,306.00		-3,395.00	4,701.00
ABA	29,486.37	29,486.79	29,487.00	124,551.00	4,845.00	129,845.00		19,349.00		19,348.00	1.00
ENUGU	4,858.68	4,860.96	4,861.00	624.00				5,482.00		5,485.00	-3.00
MKD	0.00									0.00	0.00
YOLA	7,134.00	7,134.00	7,134.00					7,134.00		7,134.00	0.00
GUSAU	5,854.00	5,581.00	5,581.00	2,916.00		1,016.00		7,126.00	391.00	7,090.00	36.00
KANO	6,583.00	6,425.00	6,425.00	39,829.00		13,869.00		31,885.00	504.00	31,881.00	4.00
TOTAL			180,607.57	6,773,502.99	8,215.00	6,402,478.69	5,855.56	258,679.21	10,555.13		

I MT = 1,356.4471935108 liters for Liquid of 737.22 kg/m³ for PMS

Source: PPMC Depot balance Templates

Table 8.5.8.1C - Summary of Depot Balances for AGO in Metric Tons

DEPOT BALANCES FOR DPK 2013 (MT)											
	C/STOCK AS REPORTED BY LAST AUDIT	CLOSING STOCK AS REPORTED BY PPMC FOR 2012	2013 OPENING STOCK	RECEIPTS	DE-WATER/ TO SLOP	SALES/ TRANSFERS OUT	OTHERS	CLOSING STOCK	UNACCOUNTED LOSSES	CALCULATE D CLOSING STOCK	CLOSING STOCK VARIANCE
ATLAS COVE	0.00									0.00	0.00
WARRI	-223.00	0.00	0.00	330,227.00		330,227.00		0.00		0.00	0.00
CALABAR	0.00					52.00				-52.00	52.00
MOSIMI	555.48	575.64	575.64					575.64		575.64	0.00
SATELLITE	131.20	131.20	131.2	63.14		67.24		0.00	0.82	126.28	-126.28
IBADAN	1,116.84	1,116.84	1,116.84	5.74				1,113.56	2.46	1,120.12	-6.56
ILORIN	443.06	443.62	443.62					424.76	18.86	424.76	0.00
BENIN	1,936.00	1,950.00	1,950.00	25,075.00	992.00	24,914.00		1,119.00		1,119.00	0.00
ORE	364.08	364.08	364.08				0.82	363.26		363.26	0.00
SULEJA	0.00		4,842.00					4,788.00	54.00	4,788.00	0.00
MINNA	8,747.00	8,744.00	8,744.00			327.00		8,419.00	7.00	8,410.00	9.00
KADUNA	-710.00	0.00	0.00	192,109.00		192,286.00		0.00	439.00	-616.00	616.00
JOS	1,700.00	1,700.00	1,696.00			325.00		1,365.00		1,371.00	-6.00
GOMBE	124.00	124.00	124.00					124.00		124.00	0.00
MAIDUGRI	787.00	787.00	787.00					787.00		787.00	0.00
PH	4,092.65	4,092.65	4,093.00	106,276.00		110,559.00		1,145.00		-190.00	1,335.00
ABA	5,113.00	5,126.00	4,251.00	22,348.00	1,163.00	25,101.27		287.00		334.73	-47.73
ENUGU	781.86	789.03	789.00	17.00				806.00		806.00	0.00
MKD	0.00									0.00	0.00
YOLA	1,162.00	1,162.00	1,162.00					1,169.00		1,162.00	7.00
GUSAU	556.00	592.00	592.00			321.00		279.00	18.00	253.00	26.00
KANO	1,231.00	1,247.00	1,247.00					1,233.00	14.00	1,233.00	0.00
3RD PARTY											
TOTAL			32,908.38	676,120.88	2,155.00	684,179.51	0.82	23,998.22	554.14		

1 MT = 1,223.7655265251 liters for Liquid of 817.5 kg/m³ for HHK

Source: PPMC Depot balance Templates

Observations

Data from PPMC on depot balances are incomplete. The imbalances observed as a result of differences in opening stock balances from closing stock balances were irreconcilable. In inventory accounting, the closing stock should be a reflection of the activities from opening stock plus receipts, sales, transfers and other uses. This is not so from the three tables above as all the products (PMS, AGO, DPK) throughout the reporting period with the exception of a few depots where there were no serious activities, reflected incomplete depot balances.

Findings

PMS

- Calabar, Mosimi, Ibadan, Ilorin, Benin, Ore, Suleja, Minna, Kaduna and PH depots recorded huge imbalances in their closing stocks.

DPK

- Calabar, Satellite, Kaduna and PH depots recorded huge imbalances in their closing stocks.

AGO

- Atlas cove, Mosimi, Ibadan, Benin, Suleja, Gombe, Gusau and PH depots recorded huge imbalances in their closing stocks.

Active depots such as Atlas Cove, Mosimi, and PH have 'wider' imbalances.

The reasons that can be deduced from these anomalies are:

- Obsolete/defective measuring equipment (flow meters, tank level gauges etc.)
- Human related factors (theft and/or vandalism).

PPMC explained that Stock management for the refinery depots-Warri and Kaduna is handled by the respective refineries. Gains and losses on the other hand are mostly apparent, primarily due to the state of the products accounting instruments.

Recommendations

NNPC should commence urgent overhaul of PPMC's obsolete and defective infrastructure especially electronic measuring equipment, pipelines and all areas that lead to inconsistent data emanating from PPMC. Efforts should be put in place to reconcile these imbalances immediately.

Inaccurate data reporting can also emanate from inability to properly operate, read and maintain the equipment within the PPMC facilities. It is imperative that a structured human capacity development is put in place along with the refurbishment activity.

Procedures should be put in place to prevent any form of fraudulent acts and malpractices. These include standing orders, documented procedures systems, internal controls and risk (on fraud) assessment.

8.5.9 Crude Oil Theft in 2013

Crude oil theft may refer to any activity relating to the theft or sabotage of crude oil, facilities or installations in form of illegal bunkering, pipeline vandalism, fuel scooping, illegal refining and transport and oil terrorism. Illegal oil bunkering is the most commonly known form of oil theft and it involves direct tapping of oil. Though oil bunkering is a necessity for maritime shipping within the maritime sector, it becomes illegal when it is carried out without requisite statutory licenses or valid documents, or in violation of the Nigerian Maritime Sector and the guidelines made by the statutory institutions regarding it.

Nigeria is the country with the highest incidents of crude oil theft in the world, according to the data released by Oilprice.com .

According to the website, with as much as 400,000 barrels of crude oil stolen daily, Nigeria is ranked worse than Mexico, Iraq, Russia and Indonesia on the top five countries most plagued by oil theft.

The report put Nigeria's losses to crude theft at \$1.7 billion, about N272 billion per month, representing 7.7 percent of Nigeria's Gross Domestic Product, GDP.

"This represents 7.7 percent of Nigeria's GDP vanishing, or more than the country spends on education and healthcare.

"These numbers paint a harsh picture about the inability of the Nigerian government and the multinational oil companies in Niger Delta, to do anything about this rampant theft.

"However, as the Global Financial Initiative points out, 'stolen Nigerian crude oil is transported on internationally registered vessels, sold to international buyers, processed by international oil refineries and paid for using international bank accounts'

The analysis below is as submitted by the IOC's with no corroborating or disputing data from NNPC and DPR.

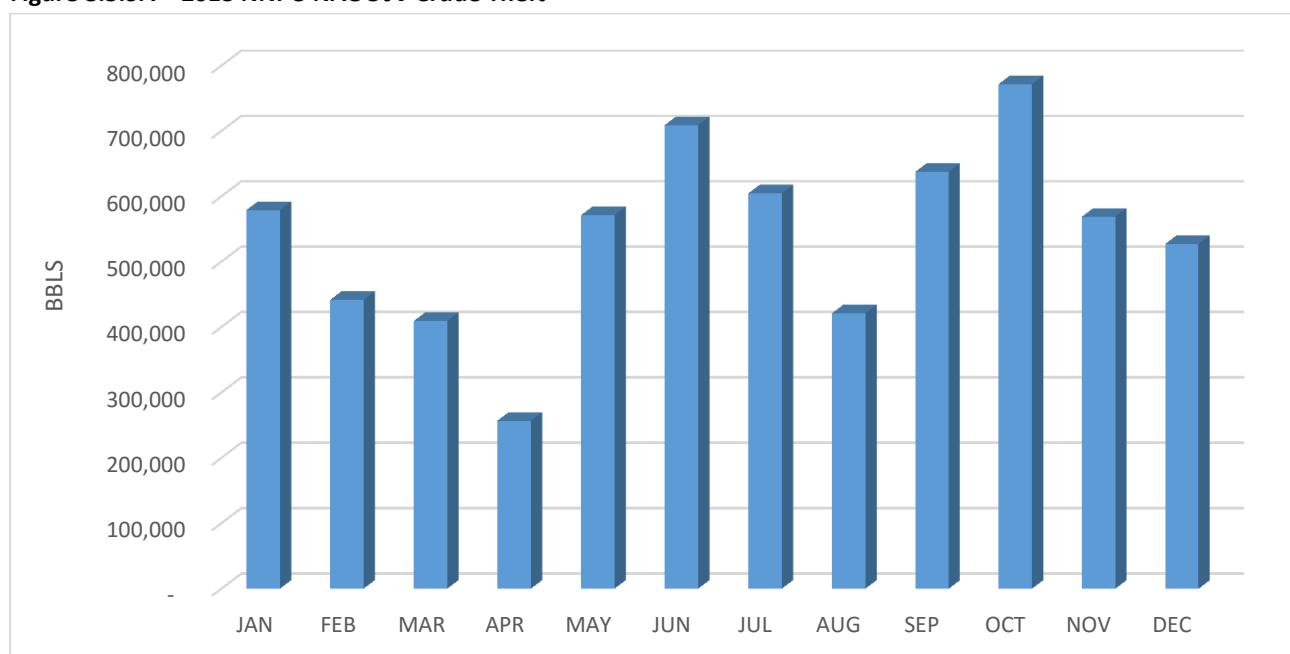
NNPC-NAOC JV

Table 8.5.9A - NAOC 2013 Crude Oil Theft and Sabotage (bbls)

MONTHS	VOLUME	FACILITY	PRICE ESTIMATE (USD)	VALUE (USD)
JAN	579,067	DELIVERY PIPELINES	115.24	66,731,681
FEB	441,525		118.81	52,457,585
MAR	409,190		112.79	46,152,540
APR	256,791		105.55	27,104,290
MAY	571,088		106	60,535,328
JUN	708,978		106.06	75,194,207
JUL	604,593		109.78	66,372,220
AUG	421,046		107.84	45,405,601
SEP	637,710		113.59	72,437,479
OCT	771,958		112.29	86,683,164
NOV	568,980		111.14	63,236,437
DEC	527,185		112.75	59,440,109
TOTAL	6,498,111			721,750,640

Source: 2013 NAOC Crude Theft/Sabotage Template, CBN 2013 Crude Oil Price for Bonny Light

Figure 8.5.9A – 2013 NNPC-NAOC JV Crude Theft



From the table above, there was an average theft of 541,509 bpm of Crude Oil with the highest in the month of October (**771,958 bbls**) and the lowest in April (**256,791 bbls**).

NNPC operates a 60-40% Joint Venture with Nigerian Agip Oil Company (NAOC 20%, ConocoPhilips 20%) thus the losses due to theft are distributed in accordance with the participating interest (equity) as shown below.

Table 8.5.9B - Entitlement to Loss (NNPC-NAOC JV)

	TOTALS	NNPC (60%)	NAOC (40%)
VOLUME (BBLS)	6,498,111	3,898,867	2,599,244
VALUE (USD)	721,750,640	433,050,384	288,700,256

From the above table, NNPC lost \$433,050,384 (estimated based on CBN's 2013 Crude prices for Bonny Light) to Crude theft.

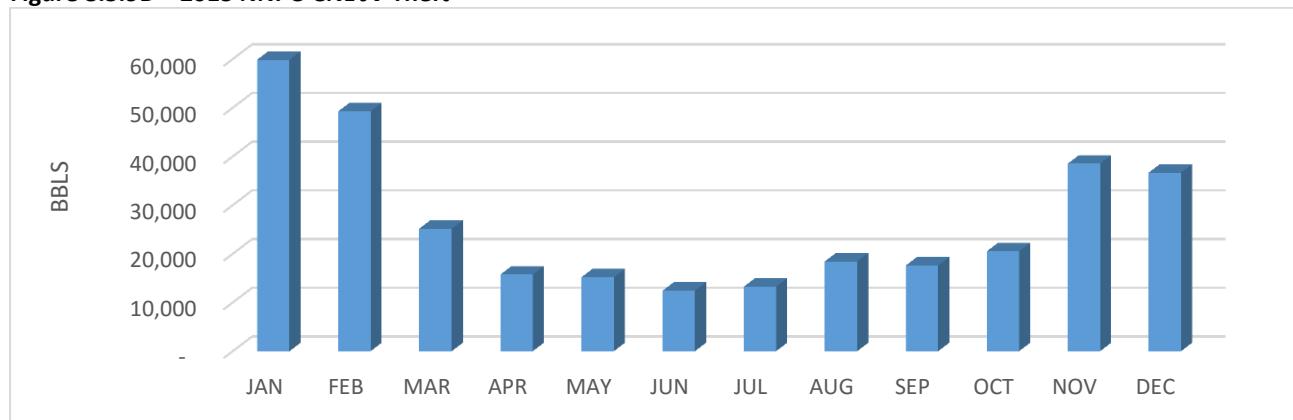
NNPC-CNL JV

Table 8.5.9C - CNL 2013 CRUDE OIL THEFT AND SABOTAGE (BBLS)

MONTHS	VOLUME	FACILITY	PRICE ESTIMATE (USD)	VALUE (USD)
JAN	59,861	DELIVERY PIPELINES (EASTERN AREA & ONSHORE WEST)	115.24	6,898,382
FEB	49,252		118.81	5,851,630
MAR	25,172		112.79	2,839,150
APR	15,750		105.55	1,662,413
MAY	15,190		106	1,610,140
JUN	12,420		106.06	1,317,265
JUL	13,237		109.78	1,453,158
AUG	18,445		107.84	1,989,109
SEP	17,610		113.59	2,000,320
OCT	20,522		112.29	2,304,415
NOV	38,520		111.14	4,281,113
DEC	36,673		112.75	4,134,881
TOTAL	322,652			36,341,975

Source: 2013 CNL Crude Theft/Sabotage Template, CBN 2013 Crude Oil Price for Bonny Light

Figure 8.5.9B – 2013 NNPC-CNL JV Theft



From the table above, there was an average theft of 26,887 bpm of Crude Oil with the highest in the month of January (**59,861 bbls**) and the lowest in June (**12,420 bbls**).

NNPC operates a 60-40% Joint Venture with Chevron Nigeria Limited thus the losses due to theft are distributed in accordance with the participating interest (equity) as shown below.

Table 8.5.9D - Entitlement to Loss (NNPC-CNL JV)

	TOTALS	NNPC (60%)	CNL (40%)
VOLUME (BBLS)	322,652	193,591	129,061
VALUE (USD)	36,341,975	21,805,185	14,536,790

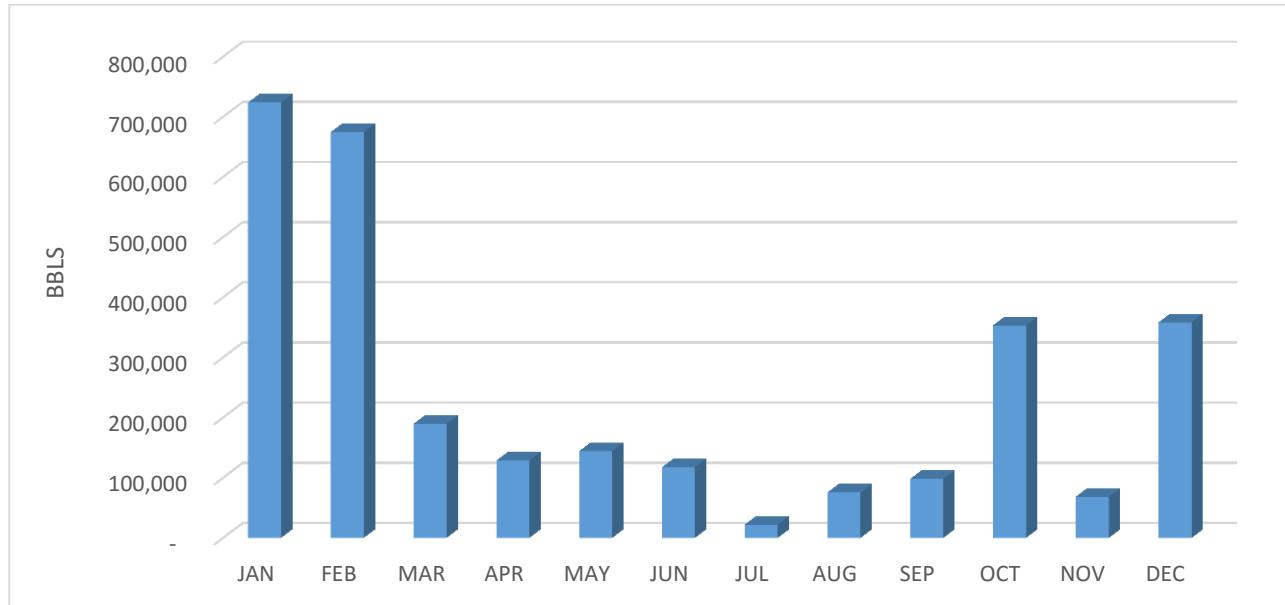
From the above table, NNPC lost **\$21,805,185** (estimated based on CBN's 2013 Crude prices for Bonny Light) to Crude theft.

NNPC-SPDC JV

Table 8.5.9E - SPDC 2013 Crude Oil Theft (Bbls)

MONTHS	VOLUME	FACILITY	PRICE ESTIMATE (USD)	VALUE (USD)
JAN	723,674	Theft are established monthly at the various Terminals [Bonny & Forcados] as a function of total loses. Total loses is the apparent shortfall in Terminal Receipts following Fiscalisation at 08:00 of every month under supervision of DPR & NNPC	115.24	83,396,192
FEB	674,527		118.81	80,140,553
MAR	189,657		112.79	21,391,413
APR	128,538		105.55	13,567,186
MAY	144,114		106	15,276,084
JUN	117,316		106.06	12,442,535
JUL	22,053		109.78	2,420,978
AUG	75,503		107.84	8,142,244
SEP	98,208		113.59	11,155,447
OCT	353,352		112.29	39,677,896
NOV	68,444		111.14	7,606,866
DEC	358,272		112.75	40,395,168
TOTAL	2,953,658			335,612,561

Figure 8.5.9C - 2013 NNPC-SPDC JV Theft



From the table above, there was an average theft of 246,138 bpm of Crude Oil with the highest in the months of January (**723,674 bbls**) and the lowest in July (**22,053 bbls**). The table further shows; all through the year, the volume of crude oil stolen was steady and this would point to some possible reasons:

According to SPDC, Theft are established monthly at the various Terminals [Bonny & Forcados] as a function of total Losses. Total losses is the apparent shortfall in Terminal Receipts following Fiscalisation at 08:00am daily of every month under supervision of DPR & NNPC.

NNPC operates a 55-45% Joint Venture with Shell Petroleum Development Company (SPDC 30%, Elf 10% and Agip 5%) thus the losses due to theft are distributed in accordance with the participating interest (equity) as shown below.

Table 8.5.9F - Entitlement to Loss (NNPC-SPDC JV)

	TOTALS	NNPC (55%)	SPDC (45%)
VOLUME (BBLS)	2,953,658	1,624,512	1,329,146
VALUE (USD)	335,612,561	184,586,909	151,025,652

From the above table, NNPC lost **\$184,586,909** (estimated based on CBN's 2013 Crude prices for Bonny Light) to Crude theft.

NNPC-SPDC JV SABOTAGE (DEFERRED PRODUCTION)

Incessant sabotage of oil and gas assets resulted into production challenges (deferred production) that in turn affected export and revenue.

The table below shows the volume and value of Crude Oil as a result of Deferred Production.

Table 8.5.9G - SPDC 2013 Production Deferments are a result of Sabotage

MONTHS	VOLUME	FACILITY	PRICE ESTIMATE (USD)	VALUE (USD)
JAN	1,943,768	WELL HEADS & FLOWSTATIONS	115.24	223,999,824
FEB	3,526,136		118.81	418,940,218
MAR	5,525,104		112.79	623,176,480
APR	15,859,920		105.55	1,674,014,550
MAY	19,622,447		106	2,079,979,382
JUN	3,268,313		106.06	346,637,277
JUL	2,731,099		109.78	299,820,048
AUG	4,067,647		107.84	438,655,052
SEP	5,869,045		113.59	666,664,822
OCT	1,745,450		112.29	195,996,581
NOV	2,420,747		111.14	269,041,822
DEC	1,950,774		112.75	219,949,769
TOTAL	68,530,450			7,456,875,825

Table 8.5.9H - Entitlement to Loss (NNPC-SPDC JV)

	TOTALS	NNPC (55%)	SPDC (45%)
VOLUME (BBLS)	68,530,450	37,691,747	30,838,702
VALUE (USD)	7,456,875,825	4,101,281,704	3,355,594,121

The above table shows; the corporation (NNPC) lost revenue due to deferred production to a tune of **\$4,101,281,704** under the NNPC-SPDC JV in 2013.

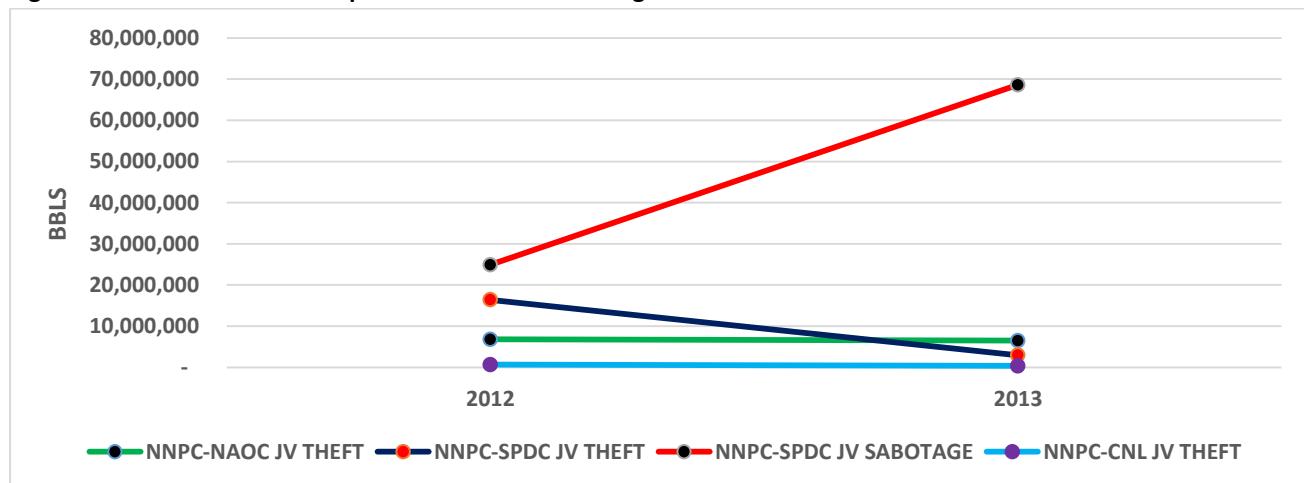
Table 8.5.9I - Summary of Losses due to Theft and Sabotage

All volumes in BBLS	2012	2013
NNPC-NAOC JV THEFT	6,778,749.00	6,498,111
NNPC-SPDC JV THEFT	16,400,290.00	2,953,658
NNPC-SPDC JV SABOTAGE	24,896,467.00	68,530,450
NNPC-CNL JV THEFT	663,129	322,652
TOTAL	48,738,635	78,304,871

Table 8.5.9J - Value of Losses Accrued to NNPC due to Losses and Sabotage

All Value in USD (\$)	2012	2013
NNPC-NAOC JV THEFT	461,846,528	433,050,384
NNPC-SPDC JV THEFT	1,030,059,940	184,586,909
NNPC-SPDC JV SABOTAGE	1,705,479,980	4,101,281,704
NNPC-CNL JV THEFT	45,615,984	21,805,185
TOTAL	3,243,002,432	4,740,724,182

Figure 8.5.9D - 2012-2013 Comparison of Theft & Sabotage



The chart above shows that there was an overall decrease in 2013 theft volumes when compared to 2012. Deferred production volumes due to sabotage increased significantly by **175.484%** in 2013 when compared to 2012.

8.5.9.1 2013 Domestic Crude Oil Losses

Crude Oil theft is not only synonymous with upstream operations but also an evil experienced in the midstream operations. There are cases of theft on the domestic allocated crude (refinery allocations) which are summarised below:

FLOW LINES/PIPELINES	LOSSES (BBL)	ESTIMATED VALUE	
		UNIT (\$)	VALUE
ESCRAVOS/CNL – WARRI	834,435	100	83,443,500
WARRI – KADUNA	566,230	100	56,623,000
NPDC – WARRI	135,262	100	13,526,200
BONNY – PHRC	865,225	100	86,522,500
TOTAL	2,401,152		240,115,200

Note: The Estimated value is based on a flat rate of \$100/bbls

Source: PPMC Crude Loss Template

FLOW LINES/PIPELINES	LOSSES (BBL)	
	2012	2013
ESCRAVOS/CNL – WARRI	1,236,516	834,435
WARRI - KADUNA	752,598	566,230
NPDC – WARRI	88,990	135,262
BONNY - PHRC	967,521	865,225
TOTAL	3,045,625	2,401,152

From COMD records, a total of **38.292 mbbls** was allocated to the refineries in 2013 for local refining as part of the domestic crude allocation of **445,000 bpd**.

From the actual pumped volume to the actual received volume, there was a variance of **2.402 mbbls (6.27%)** which PPMC attributes to theft along its pipelines.

PPMC commenced marine shipment of Crude oil in February 2011 to supply 3 refineries (2 in Port Harcourt and 1 in Warri) as against using pipelines to transport crude oil to the refineries. This was as a result of the constant attacks on the crude supply pipelines which over the years has created serious challenges for the refineries. The use of marine vessels to transport crude to the refineries is innovative and commendable as there has been steady supply of feedstock even though it has increased the cost of doing business.

8.5.9.2 Product Losses

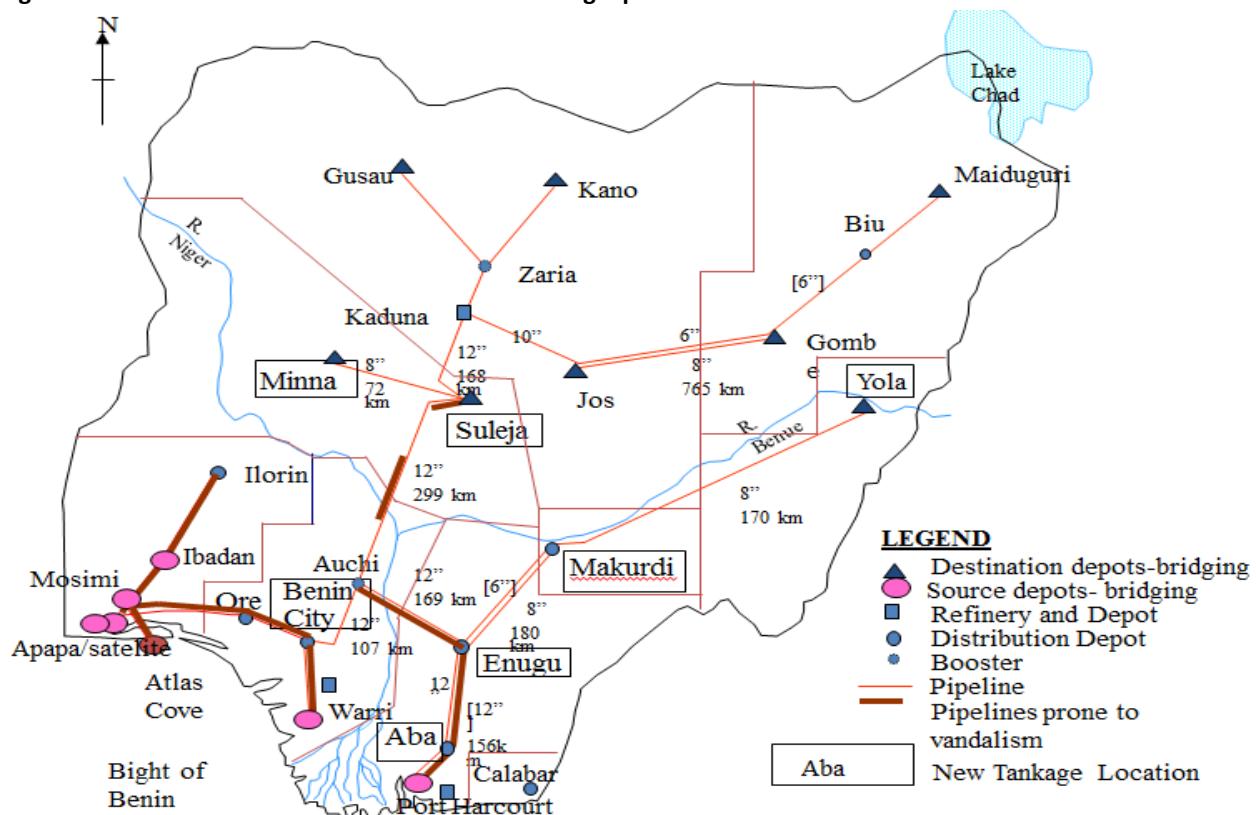
PPMC is the dominant supplier of Refined Petroleum Products to the existing domestic and growing export markets within West African Sub-Region. It operates an integrated network of about 5,120 km of pipeline constructed through communities and different terrains (Land, Swamps, Forests, Savannah, Rivers, etc). Petroleum products are distributed through the pipeline

network connecting 21 loading Depots and 24 Pump stations across the nation. Petroleum Products supply and distribution through pipeline is the most effective and cheapest means of transportation. The integrity of these pipeline networks over the years has been severely affected by the nefarious activities of vandals.

Below are the existing pipeline networks operated by PPMC.

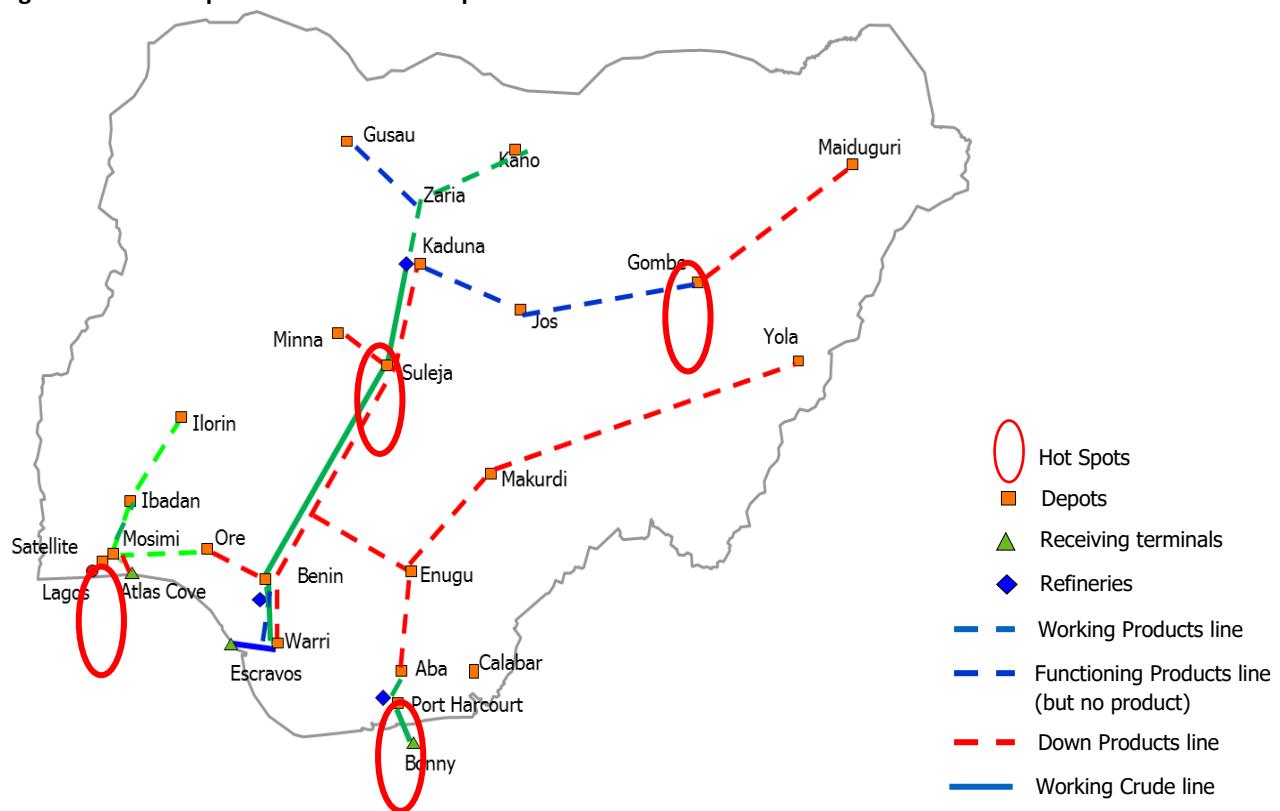
- System 2a: Warri-Ben -Ore-Mosimi
- System 2cx: Warri- Auchi-Benin
- System 2b: Atlas Cove-Mos-lb-Ilorin
- System 2c: Esc-War-Kd(Crude Line)
- System 2d: Kd-Zar-Kn, Zar-Gusau, Kd-Jos
Jos-Gombe-Maiduguri
- System 2e: ph-aba-enugu-yola
- System 2ex: ph-aba-enugu-makurdi-yola
- System 2cx: enugu-auchi, auchi-suleja-kd, soleja-minna
- System 2dx: jos-gombe –maiduguri

Figure 8.5.9.2A - Downstream Infrastructure including Pipeline



Activities of vandals became noticeable in PPMC operations in 1999. It began progressively from the Port Harcourt and Warri Areas of PPMC operations and spread to every part of PPMC pipeline network.

Figure 8.5.9.2B - Pipeline Vandalism Hot Spots

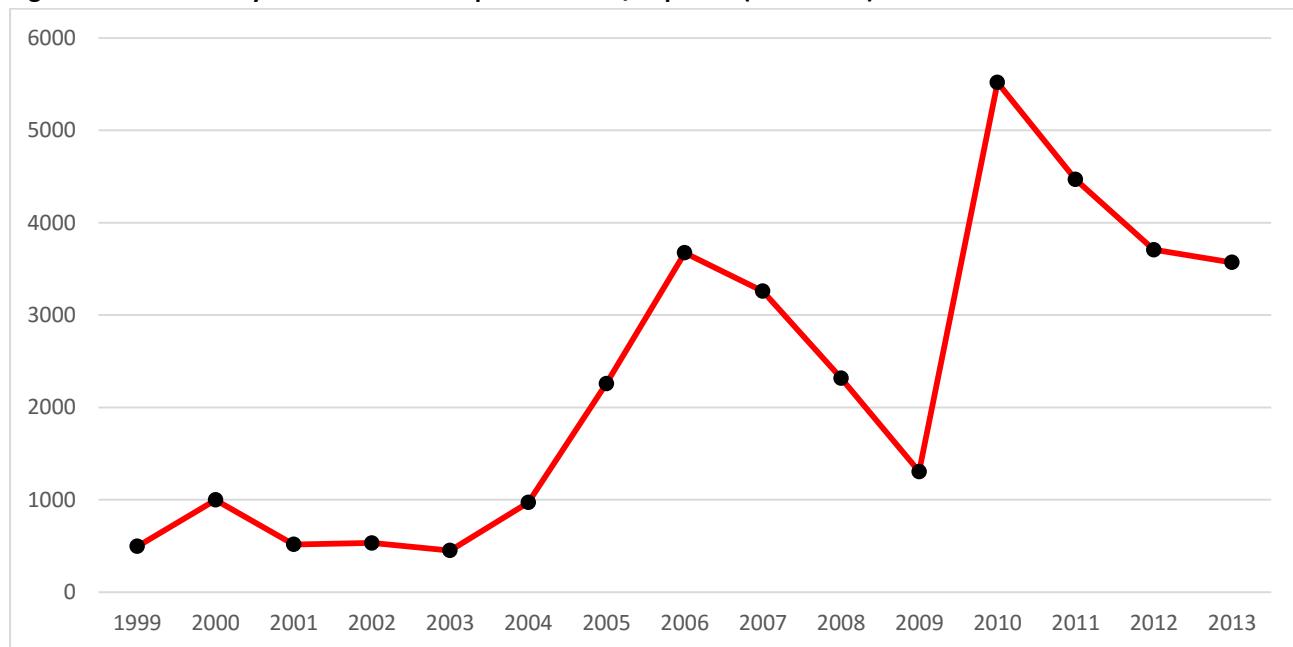


From the above figure, the hotspots are the Atlas Cove Area, Mosimi Aream, PH Area, Gombe Area and Suleja Area.

Table 8.5.9.2 - Records of Pipeline Breaks/Ruptures (1999 - 2013)

YEAR	GOMBE	KADUNA	MOSIMI	PHC	WARRI	YEARLY TOTAL
1999	7	7	50	355	78	497
2000	1	3	46	732	217	999
2001	2	36	11	385	83	517
2002	6	46	28	360	93	533
2003	2	42	45	233	130	452
2004	2	122	152	429	266	971
2005	20	243	209	1,017	769	2,258
2006	265	176	480	2,091	662	3,674
2007	716	122	459	1,655	306	3,258
2008	357	129	530	557	745	2,318
2009	86	123	483	405	208	1,305
2010	1,712	371	394	2,226	815	5,518
2011	2,573	578	467	302	548	4,468
2012	1,994	646	309	284	475	3,708
2013	866	667	1,080	641	317	3,571

Figure 8.5.9.2C - Yearly Total of Product Pipeline Breaks/Ruptures (1999-2013)



8.5.9.3 Impact of Crude Oil Theft

ECONOMIC

Nigeria Produces about two million barrels of crude oil per day while up to 200,000 barrels is speculated as being lost to Oil Theft daily. This accounts for estimates that Nigeria loses \$20bn yearly which could have Provided Massive Infrastructure, Employment and Provide Social Amenities like Clean Water, Basic Healthcare and Schools and Stronger Cash Reserves needed to finance development in the country.

ENVIRONMENTAL

Among the many factors responsible for the Degradation of the Environment is oil spillage resulting from oil theft especially the hacking of pipelines and the activities of illegal refineries which is responsible for the uncontrolled emission of Carbon into the atmosphere. Sabotage and Crude oil theft according to a report are responsible for a large percentage of Oil Spills. Oil Spills result in Ground Water Poisoning, Destruction of Agricultural Land, Fishery and Livestock and fast Disappearing Mangrove Forests.

SOCIAL

Crude Oil theft and militancy constitute major inhibitors to the socioeconomic development of the Niger-delta. As a result the responsibility towards the area has been largely neglected by administrations, organizations and companies. Another worrisome trend is the increasing percentages of school aged children who are denied formal education and action of the various

militant groups who see them as potential recruits for their illegal trade. This uneducated youths become veru vulnerable and are recruited by mititant groups into lifestyles of criminality characterized by violence and restiveness, teenage parenthood and anti-societal tendencies.

HEALTH

Crude Oil theft largely contributes to the deteriorating health conditions prevalent in the Niger Delta region of the Country. It is reported that Liquid, Solid Waste and Residues from Dumps which are not properly disposed or treated causes Contamination of Domestic Water Supplies which is responsible for a host of known diseases in this region such as Malaria and Diarrhea while respiratory diseases which constitute another percentage of the diseases in this area can be attributed to uncontrolled emissions and gas flaring.

GOVERNANCE

As the International spotlight beams on Nigeria due to the various activities of Crude Oil theft and Illegal Bunkering, the Federal Government should institutionalise the right policies and reforms in the Oil and Gas sector that will ensure more transparency, accountability and security. The passage of the long awaited PIB and the present anti-corruption stance will also ensure better governance and ultimately checkmate crude oil theft.

FACTORS RESPONSIBLE FOR CRUDE OIL THEFT

Thriving black market

Bribery and corruption

Availability of Foreign buyers of stolen crude

Inadequate funding & resources to combat Crude Oil theft

8.5.10 Key Findings relating to Crude Oil and Product losses

The following issues relate to Crude Oil and Product losses;

- a. NNPC did not provide any corroborating or disputing data on crude oil losses from its operation with the JV partners
- b. Some IOCs, notably MOBIL and TOTAL failed to populate crude losses templates, while SPDC submitted different templates from the initial templates for Crude theft and Sabotage at the conclusion of Audit.
- c. The value of NNPC's share of Crude Oil losses as reported by the companies in 2013 is about **13%** of total Federation lifting (Total NNPC lifting less those on behalf of NPDC and PANOCLEAN).
- d. Export Crude Oil losses reported by companies is significant and on the increase.

Implication

The extent of reliability to be placed on Export Crude Oil losses reported is limited, due to incomplete records from producers and lack of corroborative evidence by NNPC. There is however, no doubt that the actual losses may be more than the quantities reported in 2013.

Recommendations

- a. NNPC and DPR should maintain proper physical and financial reporting of crude and product losses through close monitoring and sharing of information with IOCs on transactions and activities relating to Oil theft and Sabotage.
- b. Federal Ministry of Petroleum Resources should ensure allocation of adequate resources technology, equipment and logistics to security agencies to enable them function effectively. These may include the use of Unmanned Aerial Vehicles (UAV's) such as quad copters for surveillance and integrity pipeline monitoring system to detect leaks.
- c. Enabling legislation, special courts and swift prosecution of offenders and their sponsors.
- d. Adoption of a standard scientific method/process as benchmark for the crude oil trade such as crude oil fingerprinting.
- e. Creating awareness about crude oil theft and engendering cooperation between the public, stakeholders and relevant local and international agencies.

8.6 System and Process Review

8.6.1 Governance Process: Review of Systems and Procedures

The global energy environment is evolving. New technology, rapid industrialization in emerging economies and a drive to cleaner sources of energy are on the landscape. The oil sands are not the only game in town. But increasingly, Nigeria and other countries have got new competition from shale oil and gas, thanks to the gains made in the U.S with hydraulic fracturing. The key probing/bothering question in all of these developments is what's Nigeria's Strategy?

The Extractive Industries Transparency Initiative (EITI) is a global standard that promotes transparency and accountability in the oil and gas and mining sectors.

Nigeria EITI (NEITI) has the responsibility for monitoring and ensuring that all payments due to the Government from all extractive industry companies, including taxes, royalties, dividends, bonuses, penalties, levies and such other income streams from the industry, are duly made. NEITI is also charged with ensuring that all fiscal allocations and statutory disbursements of revenue from EI sources due from the Federation Accounts to statutory recipients are made and properly accounted for.

This report covers the review of systems and procedures in the Nigerian Oil and Gas industry with the aim of providing recommendations for the optimal management of the sector.

8.6.2 Nature and extent of our work

The Consultant was expected to conduct a review of the systems and procedures utilized by government agencies in the oil and gas sector for purposes of calculating, recording, processing, and settling financial transactions. The procedures performed were those set out in the terms of reference.

We set out our findings in this report, we do not express an assurance of the transactions beyond the explicit statements set out in this report.

This report provides a brief background scope and objectives, our methodology and approach to the review. It then provides details of findings, recommendations for improvement and way forward for the management for the oil and gas sector.

8.6.3 Methodology

Our approach to the assignment is depicted in the diagram below:

Our methodology involves information gathering, data collection and analyses depicted below:

Figure 8.6.3 - Project methodology



The framework for the review of systems and procedures involved the following:

- **Literature review:** involving critical review of documents
 - research work on the information about the size of the extractive industry in Nigeria;
 - understanding the payment streams from extractive companies to Governmental agencies;

- **Interviews:** with management (of government agencies and extractive companies' representatives) in a one-to-one approach at different times. This approach gives the interviewers and interviewees opportunity to confirm or complement the information gathered from our various reviews and interviews.
- **Validation:** this process provided ample opportunity for the project team members and other stakeholders to clarify the issues raised as well as revalidate the information gathered from different sources,
- formulation of an opinion on the systems used in the process and
- preparation of the report on the management of the oil and gas sector

8.6.4 Structure of the Oil and Gas Sector

The future of Oil and Gas Industry has changed.

The Nigerian oil and gas industry is one of the most active petroleum province in Africa despite the challenges in recent times.

Exploration for oil and gas in Nigeria began in 1908, with the first discovery being made in the Niger Delta in 1956. Nigeria's first refinery began operations in 1965, with a capacity of 38,000 bbl/day; enough to meet domestic requirements at the time. The demand and production of oil in Nigeria has since increased tremendously, such that Nigeria's current daily production is estimated at about 2.5m bbl/day, with a domestic consumption level of 279,000 bbl/day. At the end of 2013, Nigeria's proven oil reserves were estimated to be 37.01bn barrels, a decline from the 37.2 bn barrels in 2012. The decline has been attributed to the fact that little or no significant investment has been recorded in oil exploration in the last five years and the number of wells drilled has also been on the decline since 2006. Since 2007, there has been no bid rounds.

The Nigerian National Petroleum Corporation (NNPC) was created in 1977 to oversee the regulation of the oil and natural gas industries, with secondary responsibilities for upstream and downstream developments. In 1988, the NNPC was divided into 12 subsidiary companies to regulate the sub-sectors within the industry. The Department of Petroleum Resources (DPR), within the Ministry of Petroleum Resources, is another key regulator, focusing on general compliance, leases and permits, and environmental standards.

Currently, the majority of Nigeria's major oil and natural gas projects are funded through joint ventures (JV) between international oil companies (IOCs) and NNPC, where NNPC is the majority shareholder. The rest of the contracts are managed through production sharing contracts (PSCs) with IOCs. PSCs are the fiscal regime typically, but not always, governing deep-water projects and contain more attractive terms than those in JV arrangements, the fiscal regime typically governing onshore/shallow water projects. PSC terms on deep-water projects tend to be more favorable to incentivize the development of deep-water projects.

The crude oil produced in Nigeria is classified as ‘sweet’, as it is largely sulphur-free. About 80 per cent of production wells are located in the Niger-Delta region in the southern part of the country, with notable projects including the Afam Integrated Oil and Gas Project operated by Shell and the Bonga Deep Water Project, Nigeria’s first deep-water oil discovery. The key participants in the Nigerian upstream sector include Shell, Exxon, Chevron, Eni and Total.

Nigeria holds the ninth largest gas reserves in the world. The largest oil producing African country was estimated to contain 180Tcf of proven natural gas reserves as of December 2013. Most of natural gas reserves of the country are located in the Niger Delta. Amenam-Kpono, Bonga and Akpo are the major oil and gas fields located in Niger Delta. Gbaran-Ubie, one of the latest integrated oil and gas projects in the country, achieved peak production of one billion cubic feet per day in 2011. Much of the country's natural gas is flared since most of the oil fields lack the infrastructure to produce and market associated natural gas.

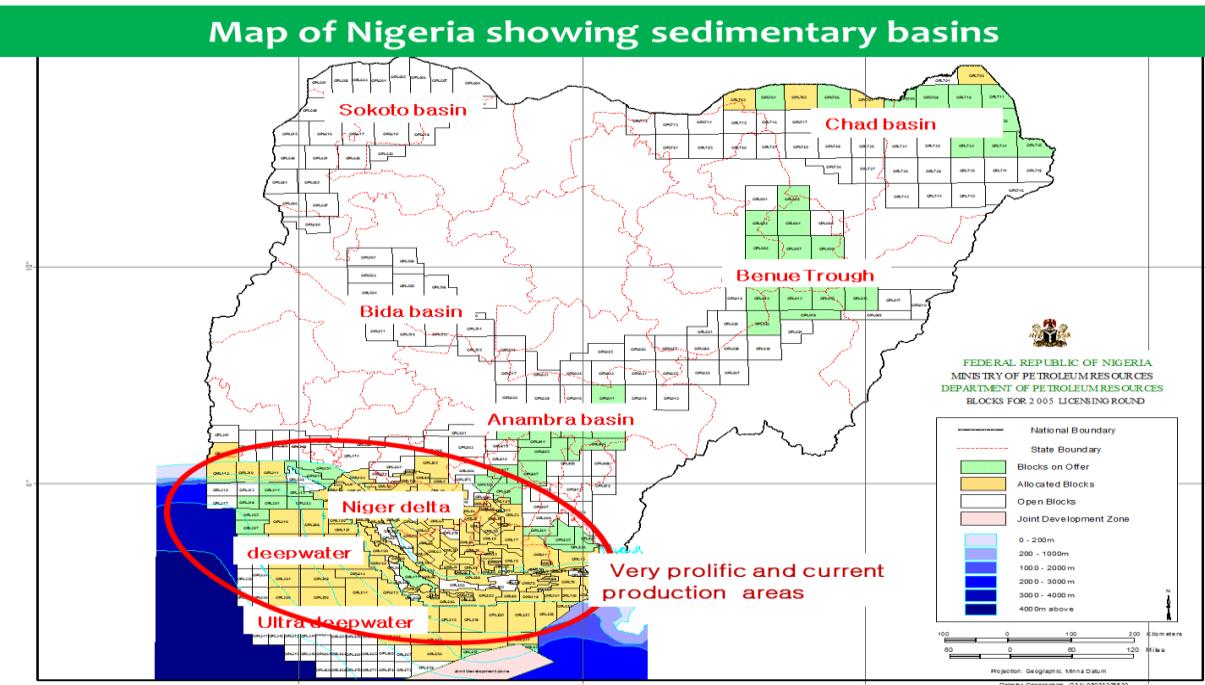
Shell is the leading gas producer in the country. It's Soku gas-gathering and condensate plant provides nearly half of the feed gas to the only LNG facility of Nigeria. Total, Eni and Chevron are among the other major foreign companies involved in Nigerian gas production. The Nigerian Gas Company (NGC), a subsidiary of Nigerian National Petroleum Corporation (NNPC), is responsible for the marketing, transmission and distribution of gas. Most of Nigeria's marketed natural gas is exported as LNG.

Due to the lack of gas infrastructure and the widespread flaring of associated gas, the Nigerian gas sector has been relatively underdeveloped and surveys have put the country's proven natural gas reserves at about 5.29 trillion cubic metres (180Tcf). In a bid to tackle this underdevelopment, the federal government prepared a Gas Master Plan in 2008, the implementation of which is currently underway. The initiative is geared at promoting natural gas production, and encouraging the supply of natural gas to domestic power stations so as to alleviate the country's energy shortage. As part of the Gas Master Plan, the National Gas Supply and Pricing Policy (Gas Pricing Policy) and the National Domestic Gas Supply and Pricing Regulations (Policy Regulations) have been issued by the government and both instruments impose obligations on gas producers to set aside a predetermined portion of their gas production for supply to the domestic market. These policies have not yet been implemented, the IOC's prefer to export gas as this is more lucrative, because it is not profitable to provide gas to the domestic market.

It is noteworthy to statethat the oil and gas naturally reacts to global events and such events sometimes challenge settled models and predictions, compelling analysts to go back to the drawing boards in search of new solutions or definitions. For example, the issue of shale oil discovery in the US, has taken a toll on our crude export, since the US has reduced its demand for Nigerian crude.

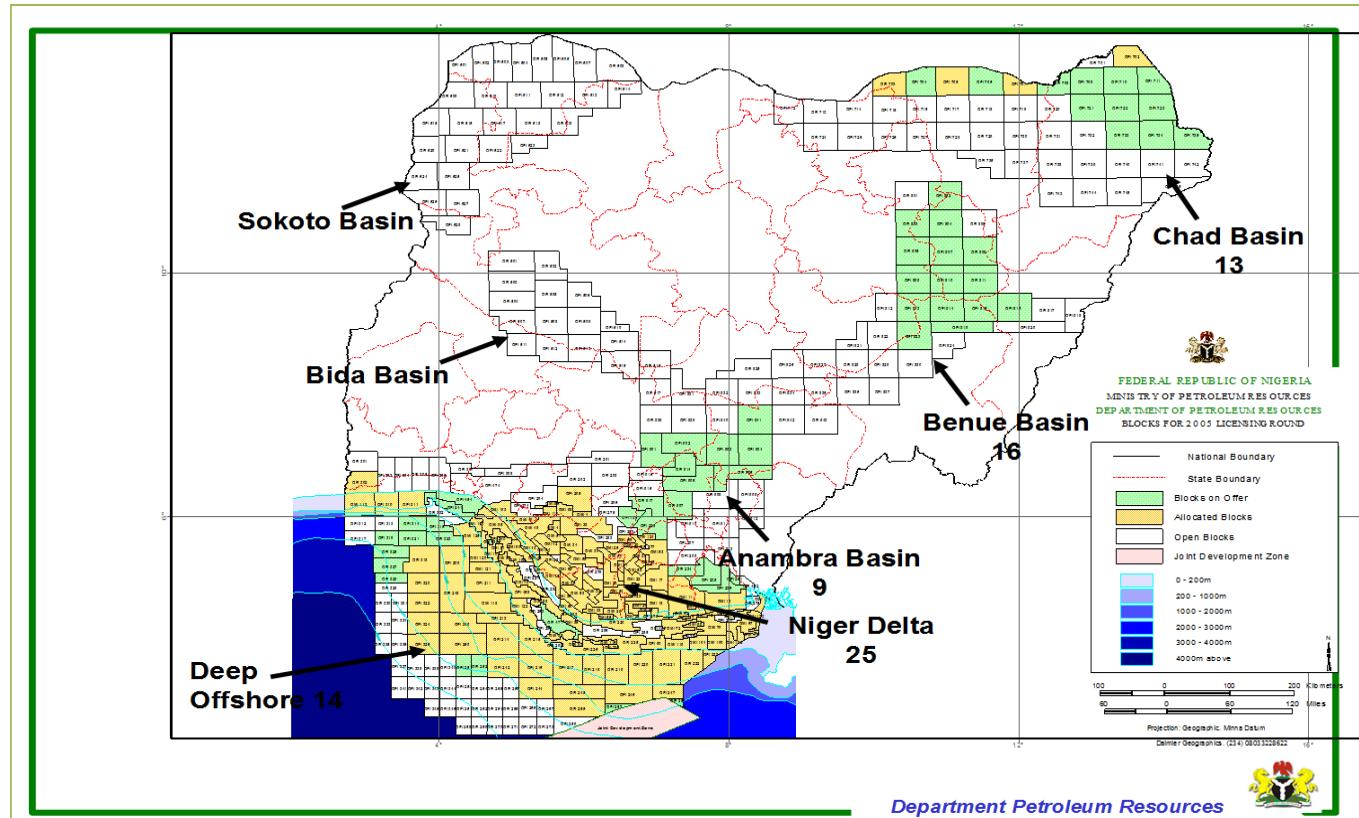
The Nigerian sedimentary basin is divided into the following: Anambra, Benue, Bida, Chad, Dahomey embayment, Sokoto and Niger delta. See the diagram below:

Figure 8.6.4A - Map of Nigeria showing sedimentary basins (DPR presentation)



The Niger Delta is still the powerhouse of Nigerian petroleum activities. A total of 177 blocks have been allocated, out of which 104 fields are currently producing oil/gas. The current acreage situation is shown below:

Figure 8.6.4B - Acreage situation



The current oil and gas reserves in comparison with previous years is stated below:

Table 8.6.4 - Comparison of oil reserves

Years	Oil reserves (MMBBLs)	Natural gas reserves (TCF)		
		Associated gas (AG)	Non-associated gas (NAG)	Total gas
2010	36,532.97	93.121	90.700	188.821
2011	36,247.41	92.945	89.872	182.817
2012	37,139.10	90.661	9.498	183.159
2013	37,070.00	92.529	89.729	182.258

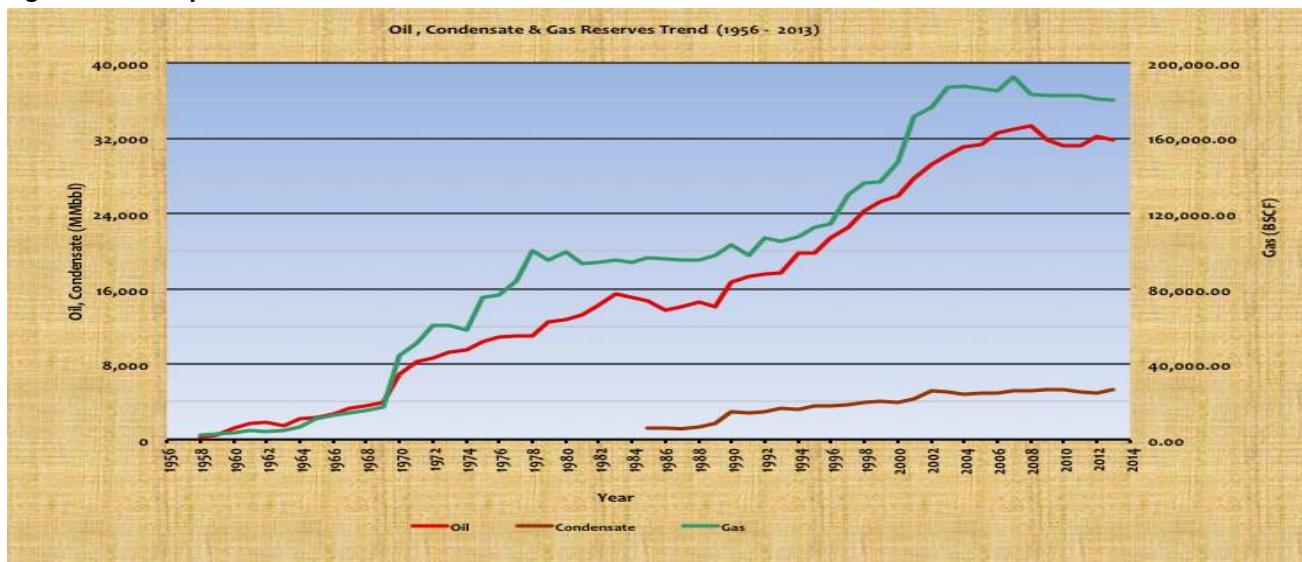
As at January 1, 2014 (31/12/2013), the Nation's Hydrocarbon reserves is

- OIL = 31.814 Billion Barrels
- CONDENSATE = 5.257 Billion Barrels
- OIL + CONDENSATE = 37.071 Billion Barrels

The above reported figures represent 0.18% decrease in Crude Oil reserves when compared to the reserves as at January 1, 2013 (37.139 Billion barrels of Crude).

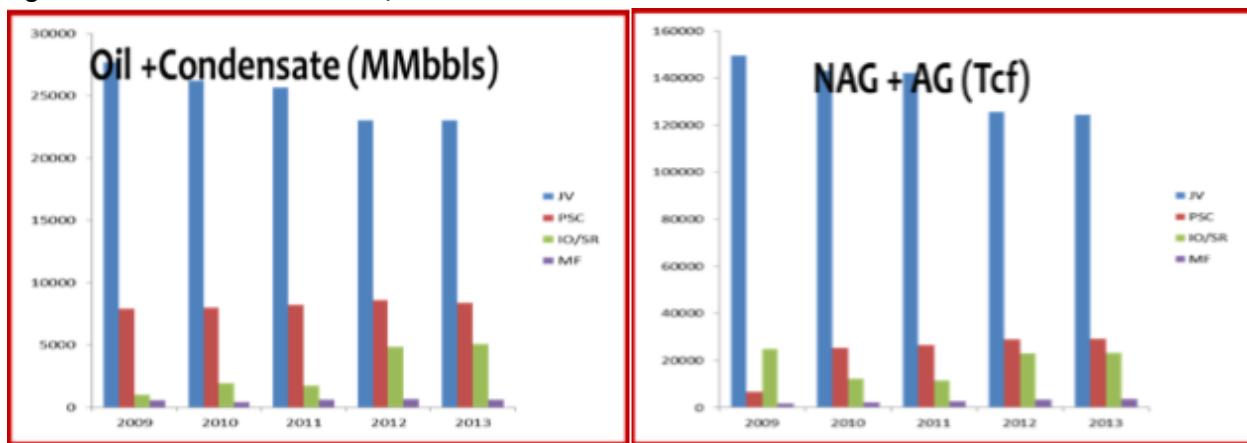
The hydrocarbon trend for 2009 – 2013 is shown below:

Figure 8.6.4C - Hydrocarbon trend 2009-2013



The trend for oil and condensate and NAG and AG are illustrated below:

Figure 8.6.4D - Oil and condensate, NAG and AG trend 2009-2013



The gas reserves shown above has been increasing constantly over the period.

8.6.5 Conceptual definition of the existing systems

The legal/regulatory system of exploration and production of hydrocarbons consists of the way Nigeria organizes oil activities and how it is involved and relates with the different agents of that industry. The legal/regulatory system also determines the relationship and involvement between Nigerian and IOCs/LOCs.

Every legal/regulatory system depends on the political and economic structure of the State, that is to say:

- Its legal structure – constitutional and infra-constitutional – and;
- Its level of involvement and participation in E&P activities.

8.6.6 Legal context

The regulation of petroleum exploration and production is governed by the Petroleum Act of 1969 as amended. The main sections included in the act are as follows:

- Vesting of petroleum in the State
- Oil exploration licenses, oil prospecting licenses and oil mining licenses
- Refineries
- Control of petroleum products
- Offences in connection with the distribution of petroleum products
- Price control
- Rights of pre-emption
- Power and duties of public officers
- Regulations
- Discharge of obligation to make payments

- Settlement of duties by arbitration
- Delegation of powers
- Offences
- Repeals, amendments, transitional and savings provisions
- Interpretation
- Short title and commencement

Other key legislation include:

- Nigerian Oil and Gas Industry Content Development Act 2010.
- Oil Pipelines Act 1965.
- Oil in Navigable Waters Act 1968.
- Associated Gas Reinjection Act 1979.
- Petroleum Profits Tax Act 1958.
- The Environmental Impact Assessment Act 1992.

Each law plays a different but significant role in the administration and regulation of the industry. In addition, they create regulatory agencies that implement government policy and ensure compliance with the respective enabling laws.

The entire ownership and control of petroleum resources (including oil and gas) in, under and on any land in Nigeria, its territorial waters and its exclusive economic zone is vested in the Federal Government of Nigeria (FGN) by virtue of the Constitution, the Petroleum Act 1969 (PA) as amended and the Exclusive Economic Zone Act (EEZA).

However, under the PA, the Minister may grant qualified persons rights to prospect, explore and produce oil and gas through the issuance of an:

- Oil exploration license (OEL) which entitles the licensee to the non-exclusive right to explore for oil and gas within the area of the grant.
- Oil prospecting license (OPL) which confers on the licensee the exclusive right to explore for oil and gas within the area of the grant, and to carry away and dispose of the petroleum won and saved during its prospective operations.
- Oil mining leases (OML) which entitles the licensee the exclusive right within the leased area to conduct exploration and prospective operations and to win, get, work, store, carry away, transport, export or otherwise treat petroleum discovered in or under the lease area.

In addition, participatory rights are granted by the FGN to contractors to conduct sole risk petroleum operations with respect to OMLs held by the NNPC (*Deep Offshore and Inland Basin Production Sharing Contracts Act*).

Abandoned or unproductive fields in lease areas covered by OMLs are farmed-out to independent leaseholders and indigenous companies periodically (*PA and Guidelines for Farm-out and Operation of Marginal Fields 2011*).

8.6.7 Structure

The industry is broadly divided into:

- Upstream sector,
- Midstream,
- Downstream sector, and
- Services sector.

The upstream operations covers the exploration, field development and production operations; the midstream covers the processing, storage & distribution, marketing and transportation of crude oil, gas, gas-to Liquids and liquefied natural gas; while the downstream involves the operations such as manufacturing, refining & petrochemicals and wholesale and marketing.

8.6.8 Upstream Sector

This sector is characterized by exploration and production of crude oil and gas (petroleum operations). The income of companies engaged in these activities is subject to tax under the Petroleum Profits Tax Act, 2004 (PPTA), as amended.

The upstream oil sector is the single most important sector in the economy, accounting for over 90% of the country's exports and about 80% of the Federal Government (FG's) revenue. Crude Oil is currently produced from three different basins: the onshore Anambra, the offshore Benin/Dahomey (deep-water and ultra-deep-water) and the Niger Delta (shallow and deep offshore basins). The Niger Delta and Benin basins are known to be the richest basins and hold the vast majority of reserves, and the source of a large portion of current production. During the late 1990s, exploration focus turned to high risk ventures in the frontier basins of deep water offshore, with encouraging success. These ventures are becoming increasingly attractive, with developments in deep-water exploration and production technology.

Nigeria's crude oil generally has a gravity between 21°API and 45°API. It's mainly exported crudes are Bonny Light (37°) and Forcados (31°). About 65% of Nigeria's oil is above 35°API with a very low sulphur content. Exploration activities have slowed down recently due to the uncertainties surrounding the passage of the proposed Petroleum Industry Bill into law. The PIB is an omnibus legislation, which will introduce significant changes into oil and gas operations in the country.

With respect to gas, a recent BP Statistical Energy Survey¹ put the proven natural gas reserves at 5.29 trillion cubic metres, 2.82% of the world's estimated reserve. Estimates of Nigeria's undiscovered gas reserves range from 300 – 600 TCF. Nigeria has therefore been described largely

as a gas province with some oil. The gas quality is high – particularly rich in liquids and low in sulphur. Due to the lack of gas infrastructure, 75% of associated gas is flared and only about 12% is re-injected.

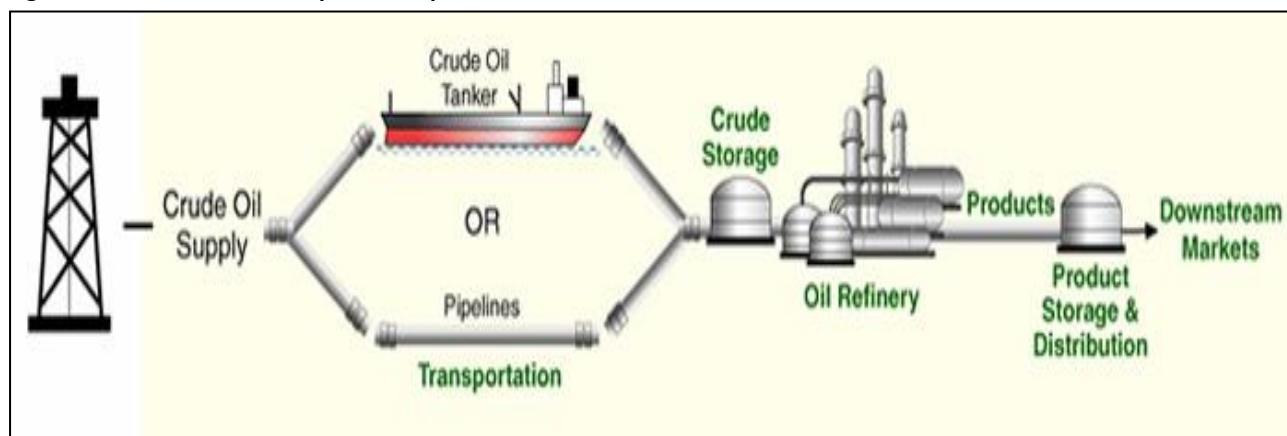
There are various arrangement in the Nigerian upstream sector namely:

- Joint venture (JV)
- Production sharing contracts (PSCs)
- Service contract (SC)
- Marginal field / indigenous contract

8.6.9 Midstream sector

The Midstream sector (processing, transportation, refining, petrochemicals), is where crude oil, natural gas and gas liquids are transported and transformed into products for the retail market. In Nigeria, the transportation of oil and gas to the refinery and gas station is carried out via the pipeline network from the wellhead to the refinery or plant. Tankers and purpose-built vessels are also used for this purpose. See the diagram below for illustration purposes:

Figure 8.6.9 - Crude oil transportation process



8.6.10 Downstream sector

The key segments in the downstream sector are discussed below:

Refining

Nigeria has four refineries: two situated in Port Harcourt and one each in Warri and Kaduna. The refineries are all wholly owned by the NNPC. However, these refineries are only working at about 30% of their installed capacity; necessitating the importation of refined products to meet growing local demand. The FGN has recently awarded contracts for Turn-Around- Maintenance to be performed on the refineries to boost the level of their production.

Distribution and Marketing

Distribution and Marketing of refined petroleum products are complementary activities. Distribution involves the transportation of refined petroleum products from the refineries through pipelines, coastal vessels, road trucks, rail wagon etc. to the storage/sale depots.

Petroleum products are supplied in Nigeria principally through the Petroleum Product Marketing Company's (PPMC) pipeline system, which links the refineries to the about 21 regional storage/sale depots.

Petroleum product marketing involves the procurement and sale of refined petroleum products. Marketers lift products from PPMC depots and deliver to their various retail outlets. They also import refined products from outside of Nigeria to meet the demands of their customers. There are however guidelines issued by the DPR to prevent importation of substandard products.

The distribution and marketing value chain for oil & gas are illustrated below:

Figure 8.6.10A - Oil distribution & marketing value chain

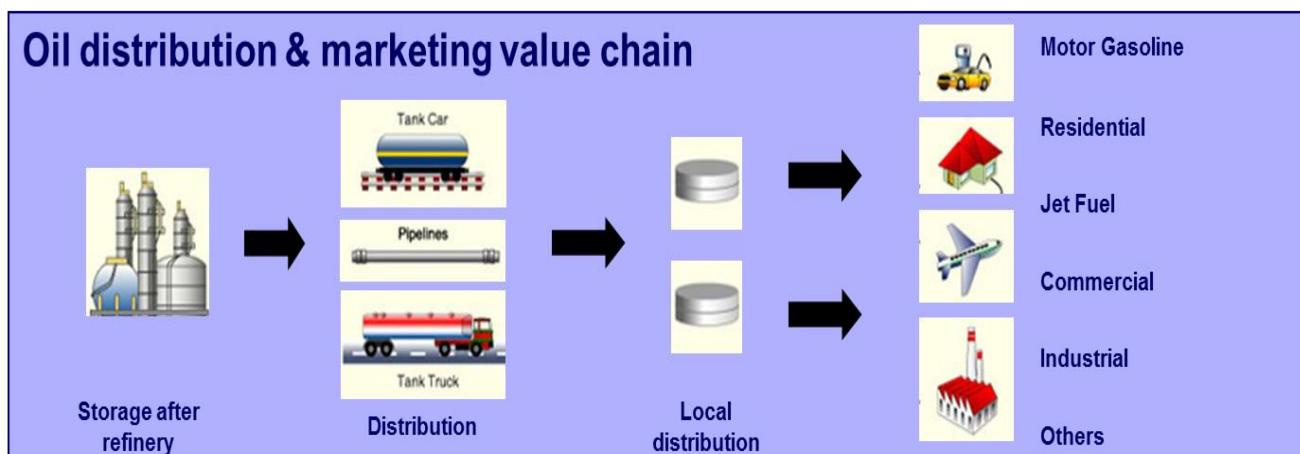
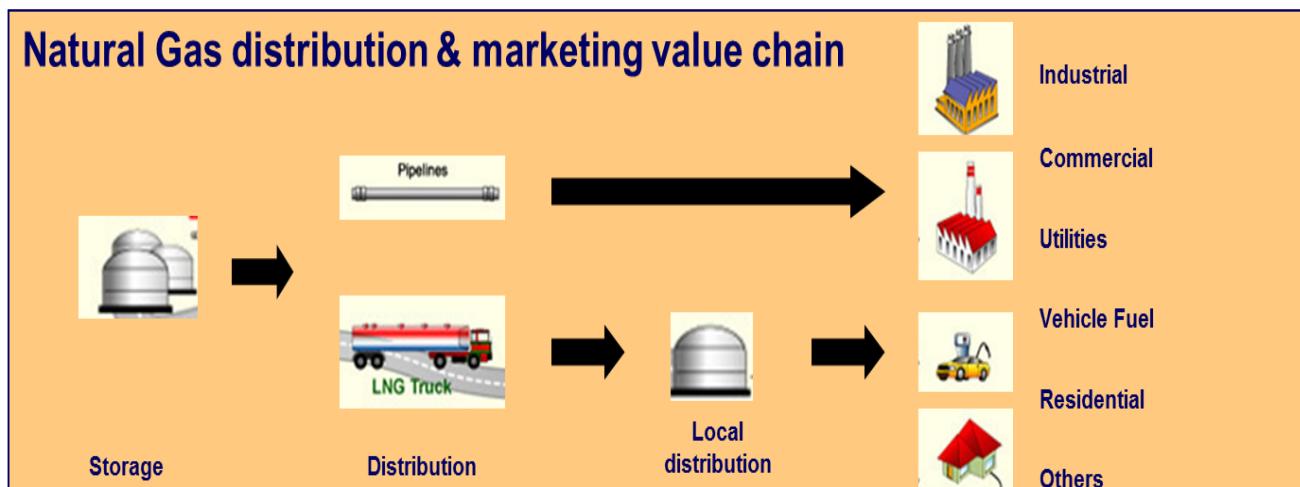


Figure 8.6.10B - Natural gas distribution & marketing value chain



8.6.11 Oil service sector

The classification of services under this sector is summarized in the table below:

Table 8.6.11 - Classification of oil services sector

Exploration support services	- Seismic data acquisition - Processing and interpretation - logging - fishing - cementing
Drilling services	-Welding services -Well drilling -Cementing -Logging -Fishing
Production support services	-Wireline services -Work over services -Production testing services -Construction of oil & gas facilities
Downstream services	-Wireline services -Refinery maintenance -Pipeline/depots construction -Petroleum products haulage -Petroleum product marketing
Others	Banking services, Catering services, Communication services

8.6.12 Gas Sector

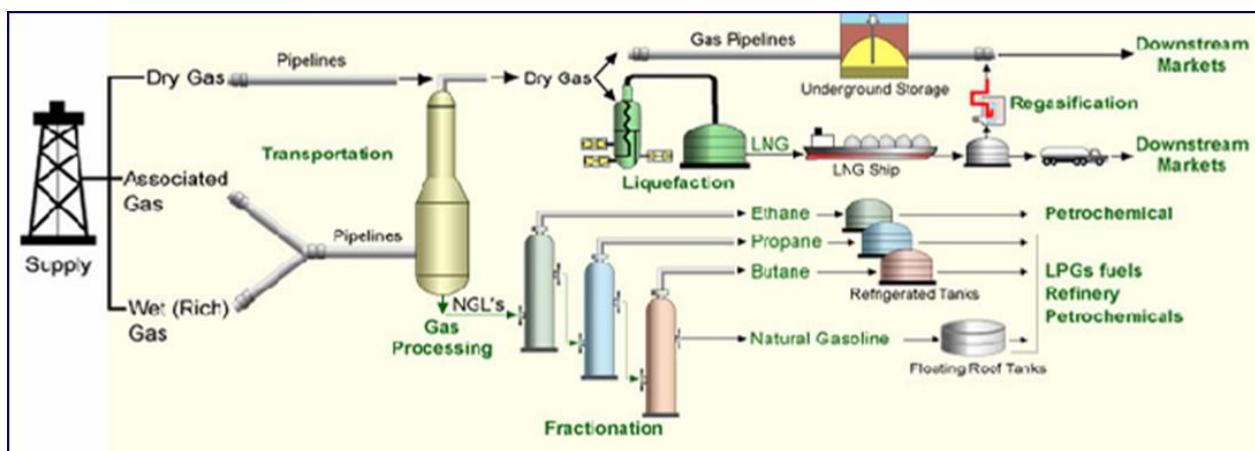
The primary market for Nigeria's natural gas was historically the export market. However, there is increased local demand for natural gas.

Domestic consumption of natural gas is mainly for:

- Power generation.
- Fertiliser production.
- Methanol production.
- Aluminium smelting.
- Cement production.
- Steel manufacturing.
- Residential consumption of bottled liquid propane gas (LPG).

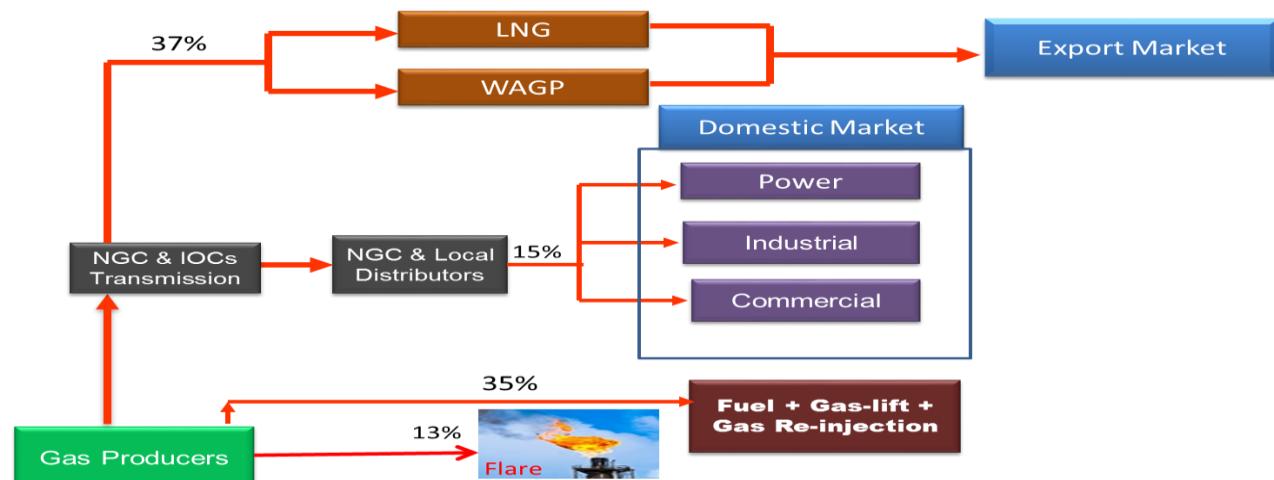
A typical process of gas processing is illustrated below:

Figure 8.6.12A - Gas processing



An overview of the Nigerian gas sector is illustrated below:

Figure 8.6.12B - Production and utilization of gas (culled from DPR presentation)



About 37% of gas produced is supplied to Nigeria liquefied natural gas (NLNG) and the West African Gas Pipeline (WAGP), while 15% is supplied to NGC and which invariably is used in the domestic market; 35% is used for processing and the balance of 13% is flared. The Nigerian Gas Company (NGC), a subsidiary of Nigerian National Petroleum Corporation (NNPC), is responsible for the marketing, transmission and distribution of gas.

Nigeria holds the largest natural gas reserves in Africa but has limited infrastructure in place to develop the sector. Nigeria's first and most ambitious gas project, the Nigeria LNG (NLNG) facility on Bonny Island has six LNG trains currently operational with a total annual capacity of 31bcm. It has become an increasingly important supplier of liquefied natural gas (LNG) to European buyers. The LNG facility is currently supplied natural gas from dedicated gas fields.

8.6.13 Results from the review process of the oil and gas sector

The review was conducted by various consultants and the methodology was adhered to. Variations of the process from 2012 audit include:

- DPR from July 2013 issues receipts for all revenue streams payments it receives
- The Accountant general's office stopped the issuance of receipts with reference to DPR receipts

Note: The variance from 2012 Audit is the issuance of receipts for all payments by DPR which started in July 2013.

8.6.14 Key Findings on Systems and Process Review

Issues from the various agencies and IOCs/IC (indigenous companies) and recommendations are enumerated in the table below:

GOVERNANCE

1. Oil bidding

No bidding took place in the year under review, the last bidding exercise occurred in 2007 whereas, there have been issuance/reallocation of licenses.

Implication

Lack of transparency and reduction in revenue accruable to government.

Recommendation

We recommend that there should be an annual or bi-annual bidding exercise and then allocation of blocks to suitable operators.

Section 190 of the draft Petroleum Industry Bill (PIB) subsection 6 ensures transparency by requesting that NEITI monitors the proceedings during Bid rounds. (“All bids received based on the bid parameters established in subsection (2) of 190 shall be processed in accordance with the published guidelines and monitored by NEITI”). NEITI should therefore pursue the speedy passage of the bill.

2. Allocation of Oil Blocks

Discretionary award of oil blocks; The Petroleum Act allows the Minister to award oil block as he/she deems fit.

Implication

This does not ensure transparency and may result in loss of revenue to the Federation.

Recommendation

The discretionary power to award should be discontinued. Due process should be followed for the allocation of oil blocks.

3. Petroleum Act

There are some provisions of the Petroleum Act that are outdated and inconsistent.

Implication

Some provisions of the Act are subject to misinterpretation.

Recommendation

The Federal Government should ensure speedy passage of the Petroleum industry Bill (PIB) which is expected to consolidate the various fiscal enactment in the Oil and Gas Industry.

4. Gas policy

There is no clear policy on Gas Utilization.

Implication

1. There are conflicting standards for Gas pricing and Utilization
2. There is no incentive for non-flaring of gas (ie 100% utilisation of all Gas produced) and penalty for Gas flaring is rather insignificant, also harnessing Gas needs major infrastructure.

Recommendation

The Federal Government should develop and implement a National Policy on Gas Utilization.

CENTRAL BANK OF NIGERIA

Audit validation of payments into CBN account revealed that some receipts were recorded without names of the paying entities and this resulted to improper recording. Unidentified templates were created by CBN to post such receipts without names of the payees. This resulted to incomplete recording and accounting. This applies to payments for Petroleum Profit Tax, Value Added Tax, Royalty Payments and payments for Gas Flare Penalties.

Implication

The implication is that some oil companies transactions could not be easily traced and reconciled with the CBN accounts.

Recommendation

The Central Bank Desk Officers in the Foreign Operations Division of the Banking Systems and Payments should always sort out complete information for the names of every paying oil companies from the Fund Remittance Platform of the foreign banks. Proper narration should always be made of every payment received by the bank to enhance easy and proper recording and accounting.

The Federal Inland Revenue Services and the Department of Petroleum Resources should re-examine the present mode of direct remittance to the concerned accounts with a view for improvement.

Audit process

1. PPPRA Post Payment Audit

The audit process leading to post payment audit of Subsidy by the Independent Auditor appointed by Ministry of Finance (MOF) need to be re-appraised. Huge and sometimes wrong payments are usually made prior to audit.

Implication

The Federation could lose funds which may be difficult to recover.

Recommendation

The system should incorporate the vetting to be done by the Independent Auditor within the 45 days period allowed.

2. DPR Receipt issuance

There is no effective receipt issuance and collection system at the DPR. The Oil and Gas Companies do not follow up on collections of DPR receipts and DPR does not have an effective means of delivering payment receipts to Oil and Gas Companies.

Implication

The Companies make payments without any supporting evidence from DPR thus creating difficulties in audit validation.

Recommendation

Payment receipts should be issued immediately after payments and Oil Companies should ensure timely collection of the receipts to ensure better reconciliation and validation in future NEITI audits.

DPR should ensure that receipts are issued once payment has been received in the JP Morgan chase account.

Technical Capacity building and Operational Facilities

The tecnical capacity and modern infrastructure for carrying out critical regulatory functions are lacking among Government agencies.

Implication

Sub-optimal performance in the discharge of regulatory functions

Recommendation

Governrnmnt should ensure adequate training and development for officers involve in regulatory functions and also provide modern facilities for the discharge of their functions in accordance with internaltional best practices.

8.7 Oil and Gas Production Companies in 2013

The list of companies that produced Crude Oil and Gas, their current production arrangements and respective operators for 2013 are stated below:

Table 8.7 - 2013 Producing Companies

Operators for 2013			
Joint Ventures (JV)			
1	Total Exploration and Production Nigeria Limited (TEPNG)	4	Chevron Nigeria Limited (CNL)
2	Nigerian Agip Oil Company Limited (NAOC)	5	Mobil Producing Nigeria Unlimited (MPNU)
3	Shell Petroleum Development Company Limited (SPDC)	6	Pan Ocean Nigeria Limited

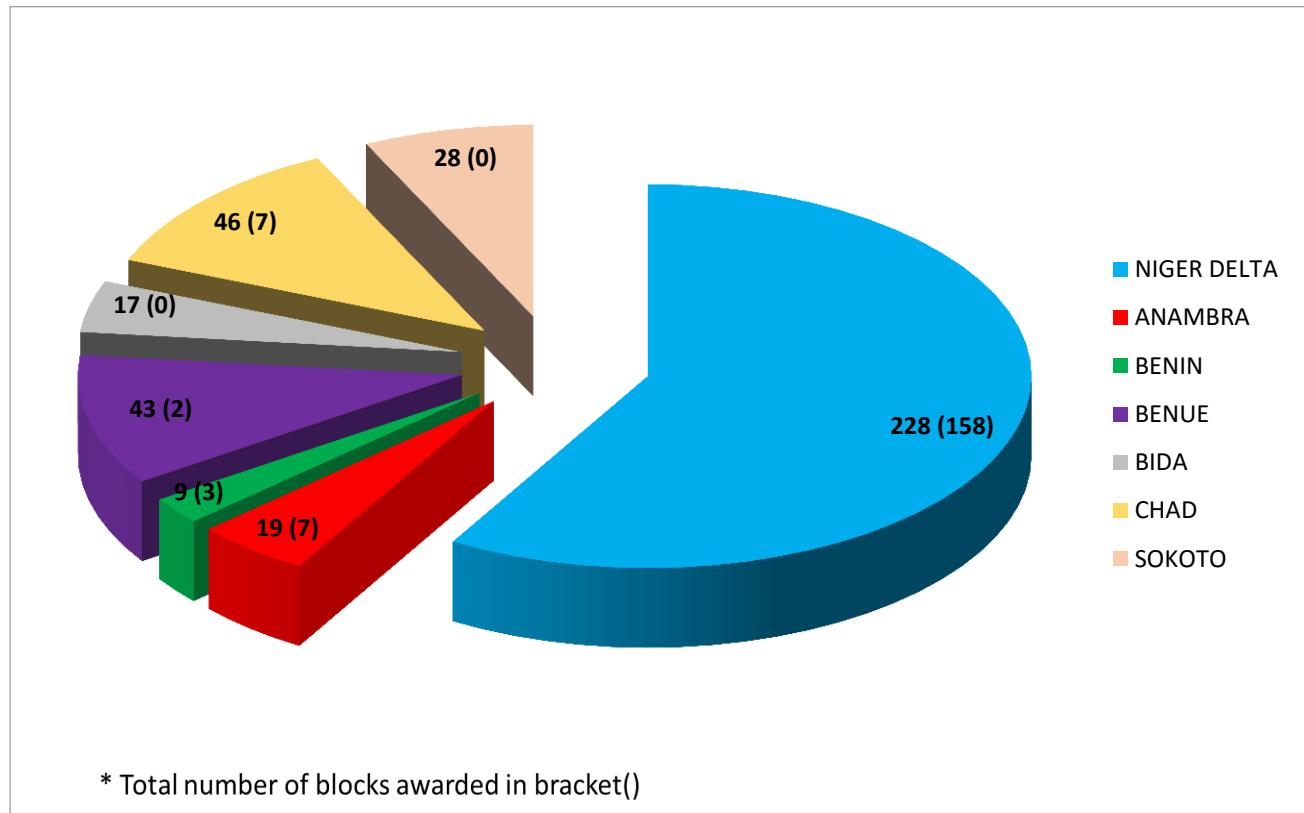
Operators for 2013				
Production Sharing Contract (PSC)				
1	Addax Petroleum Development Company Limited	5	Addax Petroleum Exploration Company Limited	
2	Esso Exploration and Production Nigeria Limited (EHRA)	6	Sterling Oil Exploration and Energy - SEEPCO (OKWUIBOME)	
3	Nigerian Agip Exploration (ABO)	7	Shell Nigeria Exploration and Production Company SNEPCO (BONGA)	
4	Total Upstream Nigeria Limited -TUPNI (USAN)	8	Phillips Oil Company Nigeria Limited	
SOLE RISK (SR)				
1	Continental Oil and Gas Limited	9	Atlas Petroleum International Limited	
2	Conoil Producing Limited	10	Dubri Oil Company Limited	
3	Amni International Petroleum Development Company Limited	11	Express Petroleum and Gas Company Limited	
4	Nigerian Petroleum Development Company Limited (NPDC)	12	Neconde Energy Limited	
5	Allied Energy Resources Limited	13	Shebah Exploration and Production CO. Limited	
6	Seplat Petroleum and Development Co. Ltd	14	Camac International Nig. Limited	
7	First Hydrocarbon Nigeria	15	Shoreline Natural Resources Limited.	
8	ND Western Ltd	16	Moni Pulo Petroleum Development	
MARGINAL FIELD (MF)				
1	Platform Petroleum Limited	6	Niger Delta Petroleum Resources Limited	
2	Midwestern Oil and Gas Company Limited	7	New Cross Petroleum Limited	
3	Pillar Petroleum Limited	8	Energia Limited	
4	Walter Smith Petroman Oil Limited	9	Brittania-U Nigeria Limited	

Operators for 2013			
5	Oriental Energy Resources Limited		
Service Contracts (SC)			
1	Agip Energy and Natural Resources (AENR)		

8.7.1 Review of Licensing

In the period under review, no bid rounds were conducted. The last bid round conducted was in 2007. The current status of the awarded blocks are depicted in the chart below:

Figure 8.7.1- Concession Status of 2013 data culled from Oil & Gas statistical bulletin



However, In the year under review, the sum of **\$12.5m** was paid by SIGMUND OILFIELDS LTD as signature bonus with respect to OML 2012.

Furthermore to buttress the issue of revenue drainage due to lack of bidding exercise, the table below shows the allocated and open blocks:

Table 8.7.1- Open and Allocated blocks status; data culled from Oil & Gas statistical bulletin

S/N	Basin/Terrain	Allocated	Open	Total no. of Blocks
1	Niger Delta & Benin (Deep Offshore)	40	54	94
2	Niger Delta (Continental Shelf)	51	6	57
3	Niger Delta (Onshore)	67	5	72
4	Anambra (Inland) Basin	7	12	19
5	Benin (Inland) Basin	3	6	9
6	Chad (Inland) Basin	7	39	46
7	Benue (Inland) Basin	2	41	43
8	Sokoto (Inland) Basin	0	28	28
9	Bida (Inland) Basin	0	17	17
	TOTAL	177	208	385

8.7.1.1 The Licensing Legal Process

In accordance with Petroleum Act of 1969 (as amended), the Ministry of Petroleum Resources, through the Department of Petroleum Resources (DPR) is empowered to oversee Oil Blocks Licensing in Nigeria. The legislations governing DPR are:

- a) Petroleum Act 1969 and the Petroleum (Amendment) Decree 1996.
- b) Petroleum (Drilling and Production) Regulations, 1969 with amendments in 1973, 1979, 1995, 1996 and Petroleum (Amendment) Decree 1996.
- c) Mineral Oils (Safety) Regulations, 1963.
- d) Petroleum Profit Tax Act, 1959 with amendments in 1967, 1970, 1973 and 1979.
- e) Oil Pipeline Act 1956, as amended in 1965.
- f) Nigerian National Petroleum Corporation Decree 1977.
- g) Associated Gas Re-injection Decree 1979, as amended in 1985. (viii) Production Sharing Decree 1999.
- h) Deep Water Block Allocations to companies (Back-in-Rights) Regulations 2003.
- i) Oil Prospecting Licenses (Conversion to Oil Mining Leases etc.) Regulations 2003.

The above legislations contain details of the License and permit types, as well as the obligations and rights of the concessionaire to guide new entrants and all other existing operating companies.

Terms and conditions of operations, technical specifications of the equipment and installations, health, safety and the environment matters are also covered in the legislation. More information can be found on <https://dpr.gov.ng/index/license-permit/>.

8.7.2 The Licensing Process

The Nigerian Petroleum Act as amended sets out the criteria for issuance of licenses. DPR processes applications for various Licenses, Permits and approvals across the entire Oil and Gas value chain. The table below shows the licenses and the office the value is accruable:

Table 8.7.2 - Licenses and accounts accruable

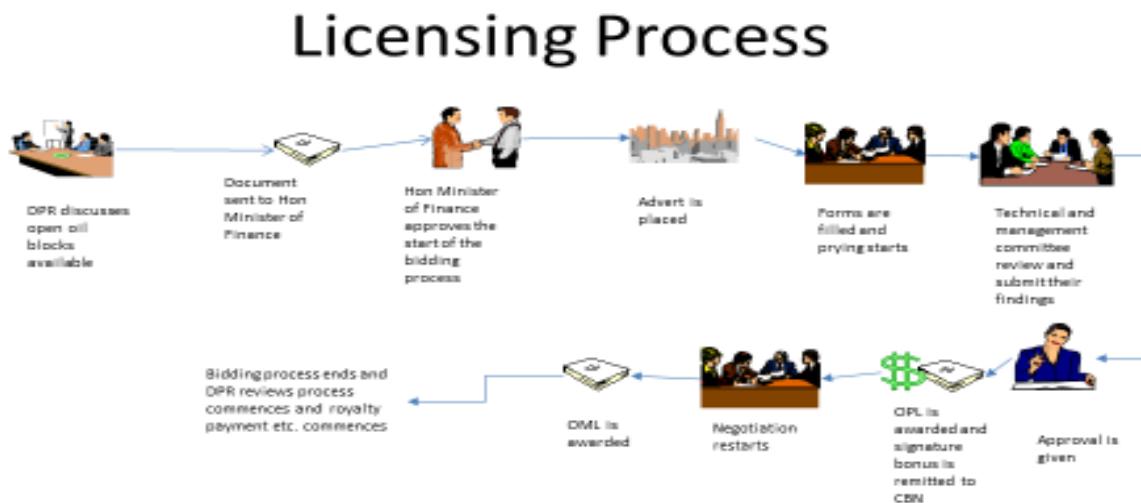
License	Accounts
OEL (oil exploration license)	Accrues to the Federation Account
OPL (oil prospecting license)	
OML (oil mining license)	
BUNKERING	Accrues to the Accountant General's Office
EXPORT PERMIT	
FILLING STATION	
DEPOT	
LUBRICANT RETAILERS LICENSE	
PIPELINE	
LUBE PLANT	
REFINERY AND HYDROCARBON PROCESSING PLANTS	
PETROLEUM PRODUCTS IMPORT	
STATUTORY GUIDELINES FOR OPERATION OF COASTAL VESSELS	
OFFSHORE SAFETY PERMIT (OSP)	
PROCEDURE GUIDE FOR THE CONSTRUCTION AND MAINTENANCE OF FIXED OFFSHORE PLATFORMS.	
DESIGN AND CONSTRUCTION OF OIL AND GAS SURFACE PRODUCTION FACILITIES.	

The licensing system for Nigeria varies depending on the license as stated below:

- (i) The deep offshore areas (water depth beyond 200m) and inland areas.
- (ii) The Onshore and shallow water areas.

The summary of the licensing process is shown below:

Figure 8.2.2 - Licensing process diagram



NB: The variance from 2012 is the issuance of receipts for all payments.

Details are stated in the next subsections.

8.7.3 Procedures for oil blocks bidding and licensing rounds

8.7.3.1 Participation in Bids

To participate in Licensing Rounds, a company must:

- Be a Limited Liability Company incorporated in Nigeria with a share capital of not less than Two Million Naira in ordinary shares.
- Have a recognizable office and employing not less than 20 personnel.
- Have at least two of its Directors as Nigerians with Oil and Gas experience.

8.7.3.2 Oil Block Bidding and Award Procedures

The approval of the Hon. Minister of Petroleum Resources is required for the granting of an Oil Prospecting License (OPL). The approval procedures are as follows:

8.7.3.3 Advertisement

The Department of Petroleum Resources (DPR) is charged with the responsibility to advertise all blocks available for bidding in Nigeria through:

- a. National dailies and magazines, and International publications as approved by Government.
- b. Dedicated DPR website, which shall also provide the platform for various bid processes including registration, qualification, analysis and interactive communication with bidders.

8.7.3.4 Bid Guidelines

Bid Guidelines are issued by the DPR to prospective Bidders to guide them. The Guidelines contain details of the application modalities, documentation to be provided, application fees payable and deadline for submission of Bid Documents.

8.7.3.5 Bid Application and Application Fees

A Bidding Form shall be provided by the DPR and the non-refundable chargeable fees shall be **\$10,000.00 (Ten Thousand US Dollars)** per block.

8.7.3.6 Bid Processing and Processing Fees

Bid Processing Fee is usually US \$10,000.00 (Ten Thousand US Dollars) per block. The Bid Processing Fee shall be paid in Certified Bank Draft into a DPR Domiciliary Account. The amount shall be used by the DPR to meet the processing expenses of the Licensing Rounds.

8.7.3.7 Data Prying Fees

Data prying fee is **\$25,000.00** (Twenty Five Thousand US Dollars) per block and is optional. It enables prospective Bidders to have access to general Seismic Data already acquired with respect to the particular blocks on offer. Data may also be purchased or leased at commercial rates from certain oil services companies, a list of which will be made available by the DPR.

8.7.3.8 Pre-Qualification Requirements

The following are the Pre-qualification requirements for the bid process;

- a) **Evidence of Registration:** The Company must be registered solely for Exploration and Production business and shall provide evidence of such registration by way of a Certificate of Incorporation and a copy of the Articles and Memorandum of Association.
- b) **Evidence of Financial Resources:** Companies intending to obtain Operator status shall present a letter from their bank confirming that the Company has at least US

\$10,000,000.00 (Ten Million Dollars) or **N1,000,000,000.00** (One Billion Naira) as the case may be.

In the case of a Nigerian company with technical partner, they shall provide such joint evidence of same amount.

There must be evidence also that the company has maintained an account balance of at least One Billion Naira or Ten Million United States Dollars for at least six months prior to the date of application.

Companies intending to participate as Local Content providers or those intending to obtain upstream acreage owing to their involvement in strategic downstream projects should demonstrate the ability to pay their equity participation.

- c) **Evidence of the Company's Technical Capability.** Evidence of a company's technical capacity, capability and track record with emphasis on experience and expertise in exploration, development and production shall be required. The ability of an applicant to fully meet the objective of encouraging expeditious, efficient exploration to identify and produce oil and gas resources of the nation will enhance its application.
- d) **Environmental Policies of Applicant:** Detailed Health, Safety and Environment (HSE) policies and procedure of the company should be stated with particular reference to environmental impact assessment/analyses.
- e) **Local Content:** Local content refers to those activities (or parts of them) in the proposed work programme which the applicant shall mandate to a Local Content provider approved or designated by Government. A list of the activities that qualify as Local Content is published in the DPR website. The Local Content Development Act, 2010 has given legal backing to local content requirements which are expected to be strictly observed by prospective Bidders.

Government's intention since 2005 is to make local content a biddable item in Bid Rounds with the introduction of the Local Content Vehicle (LCV) in Oil Blocks allocation procedures.

f) **Evidence of Payments**

This will include evidence of payment of the Application Fee and Bid Processing Fee.

8.7.3.9 Bid Evaluation

8.7.3.9.1 Technical Evaluation

The objective of this phase is to analyse and weight the technical capacities and competencies of prospective bidders. Those qualified as Operators are classified in three categories:

- Class (A) operator: qualified to operate in the deep offshore and frontier inland basins;
- Class (B) operator: classified to operate in blocks located in Niger Delta shallow waters or onshore and Inland basins; and
- Class (C) operator: qualified to operate in Niger Delta shallow waters or onshore only.

At the end of the qualification exercise the Bid Committee shall publish a list of all qualified operators and partners (including the list of blocks that partners may participate in, and their allocated equity).

A company may qualify both as an operator in certain zones and as a partner in other zones.

8.7.3.9.2 Commercial Evaluation

The objective of this phase is to obtain a fair value for the State and determine the companies to be designated Operators on the basis of the commercial package offered by the companies. Only qualified operators can submit commercial offers in respect of the blocks applied for. The Commercial Offers shall consist of the following:

- a. **Signature Bonus:** This is the amount in US\$ that the company is willing to pay at once on signing the production sharing contract (PSC) Agreement. The Bid Guidelines will normally indicate a minimum value of the Signature Bonus. The sum paid shall be equal to or exceed the prescribed minimum.
- b. **Work Programme Commitment:** The work programme (seismic and wells expressed in both volume and US\$ value) that the company is willing to carry out on the block. Again, this shall be equal to or exceed the prescribed minimum.
- c. **Local Content:** The activities that the Operator is willing to mandate to its local content partner from the Activity List defined for Work Programme Commitment expressed in US\$ value.
- d. **Ceiling for Cost Oil Recovery:** The Maximum level of Cost Oil expressed as a percentage of total production that the company is willing to accept in the Production Sharing Contract. The ceiling shall not exceed 80%.

8.7.3.9.3 Commercial Evaluation Parameters

The Commercial Bids shall normally be based on the following four parameters:

1. **Signature Bonus (Weight 40%):** The maximum is scored by bids that are twice the minimum or more. Bids are then evaluated at percentage over the minimum.

2. **Cost Oil Ceiling (Weight 20%):** The maximum is scored by bids that specify 70% or below. Bids are then evaluated at percentage below 80%
3. **Local Content (Weight 20%):** The percentage of the work programme commitment to score the minimum is 30%. Bids are scored according to the percentage of work commitment prorated below 30%.
4. **Work Commitment. (Weight 20%):** The maximum is scored by bids that are twice the minimum. Bids are then evaluated at percentage over the minimum.

8.7.3.10 Bidding Conference

The companies offer the commercial bids on the date set for the bidding conference. The bidding shall normally be a two day event to which all stakeholders –industry including the press are invited. The offers are presented openly, verified, evaluated and announced on the spot, with the aid of a computer system and the result displayed on a video screen in front of the audience.

8.7.3.10.1 Procedures at the Bidding conference

a) Registration

This involves delivery of offers (in specific Registration Form and envelopes), as well as in magnetic media such as CD-ROM or Floppy disk. The company's accredited representative is called to place their offer in an envelope and deliver an electronic copy on disk to the Bid Round staff. The company's accredited representative places the Offer envelope and waits for the opening;

b) Analyses and comparisons of Offers

The Bidding Round staff pronounces the opening of each envelope (provided by the company's representative); the offer is validated and checked against the electronic copy (checking for errors or offers not adherent to requirements). The analysis of the offer is done based on the given parameters and weights to finally establish a winner for the block.

8.7.3.11 Bid Winner and Contract Signing

- a. **Announcement of the winner:** Announcement of results to stakeholders is done through certain channels - website, press (official or private) and also instantly to the Bid Round participants through wide screen TV platforms.
- b. **Closing of the Bid Round:** The closing is the last part of the Licensing Round overall process and is composed by:
 - I. Finalization of the draft PSC Agreement by including the company data and adjusting specific clauses of contract.
 - II. PSC Signing -Effective signature of contract and dissemination of relevant information about it to the other relevant arms of Government -NNPC, FMF, Justice, FIRS etc. The main objective here is to synchronize information about the PSC agreement and allow further follow-up of company activities.

8.7.3.12 Payment of Signature Bonus

On the grant of an Oil Prospecting License (OPL), the signature bonus shall be due for payment within a period of 90 days from the date of signing the applicable agreement.

If the company fails to pay the required Signature Bonus at the expiration of the 90-day period, revocation notices, which will last 30 days, shall be given. This brings the maximum allowable period for Signature Bonus payment to 120 days.

If the company is not able to pay up within the 30 days of revocation notice the allocation shall be revoked without further notice.

8.7.4 National Policy on Petroleum Exploration and Development

The policy allows participation by both public and private (indigenous or foreign) interests in the exploration and development of petroleum resources of the country. The main objectives of the policy are as follows:

- I. Expand the scope of participation in Nigeria's oil industry and diversify the sources of investment and inflow of funds.
- II. Increase the oil and gas reserves base through aggressive exploration.
- III. Promote indigenous participation in the oil industry thereby fostering technological transfer, local goods and services utilization, and indigene employees' skills and competencies acquisition.
- IV. Ensure that periodic, open competitive bidding for acreages are carried out and that awardees do not hawk these blocks in the open market to third parties.

8.7.5 Ownership of Petroleum Resources in Nigeria and State Powers

All the hydrocarbon resources in Nigeria are vested in the Federal Government, whose sole responsibility is to control the resources and only permit their exploitation under license, in accordance with the Petroleum Act 1969.

The State allocates acreages (licenses) to operators in any such areas deemed to have potential for petroleum accumulation at the discretion of the Minister of Petroleum Resources.

The allocations shall be based on a set of criteria made known to qualified and deserving companies at the time such blocks are open for bidding.

The State reserves the right to participate in the operations of any block and to determine the type of contractual arrangements between the awardees and the Government.

The State reserves the right to recommend Local Content providers to participate in any block for the purposes of furthering the Local Content policy aspirations of Government. The Local Content Development Act 2010 has now given legal backing to local content requirements in the industry for participation in oil and gas operations in Nigeria.

8.7.6 Participation in Petroleum Exploration and Production Operations in Nigeria

Only the holder of a concession or assignee, or their accredited contractors shall engage in petroleum exploration and production operations in Nigeria.

Concessions shall be allocated to operators based on Open Competitive Bidding process.

Concessions or licenses may be granted only to a company incorporated in Nigeria to carry out petroleum operations under the Petroleum Act, 1969, as amended.

The company must be registered solely to carry on the business of Petroleum operations.

Special incentives are given to investors willing to participate in exploration and production activities in the inland basins comprising Chad, Benue, Bida, Sokoto, Anambra, etc.

8.7.7 The efficiency and effectiveness of licensing systems

From detailed review of the licensing system in Nigeria Oil and Gas Industry, the audit observed that though there is a robust established licensing system, the system however, cannot be said to be efficient and effective. An example of the contravention of the laid down licensing procedures was the divestment of some OMLs from SPDC and NAOC JVs by NNPC (the national oil company of the federation) to NPDC (NNPC subsidiary) under a non transparent circumstance and also not an arm's length transaction.

8.8 Review of Management of Sector Finances

8.8.1 Introduction

The Management of the Oil and Gas Sector is an enormous task. The Nigeria Extractive Industries Transparency Initiative (NEITI) has the responsibility for monitoring and ensuring that all payments due to the Government from all extractive industry companies, including taxes, royalties, dividends, bonuses, penalties, levies and such other income streams from the industry, are duly made. NEITI is also charged with ensuring that all fiscal allocations and statutory disbursements of revenue from Extractive Industry (EI) sources due from the Federation Account to statutory recipients are made and properly accounted for.

The Accountant-General of the Federation (OAGF) is the Chief Accounting Officer charged with the constitutional role of preparing the nation's financial statements arising from collection and Receipts of income, Fees, Rentals and Taxes and payment out of the Federation Account. Accordingly, Sec 85 S.5 of the Constitution provides that, "The Auditor-General shall, within ninety (90) days of the receipts of the Accountant-General's Financial Statement, submit his reports under this section to each House of the National Assembly responsible for public accounts".

The office of the Accountant-General of the Federation (OAGF) is the executive arm of Government responsible for maintaining records for all revenues and receipt and payments into and out of the Federation Account.

The key issues centre around these areas:

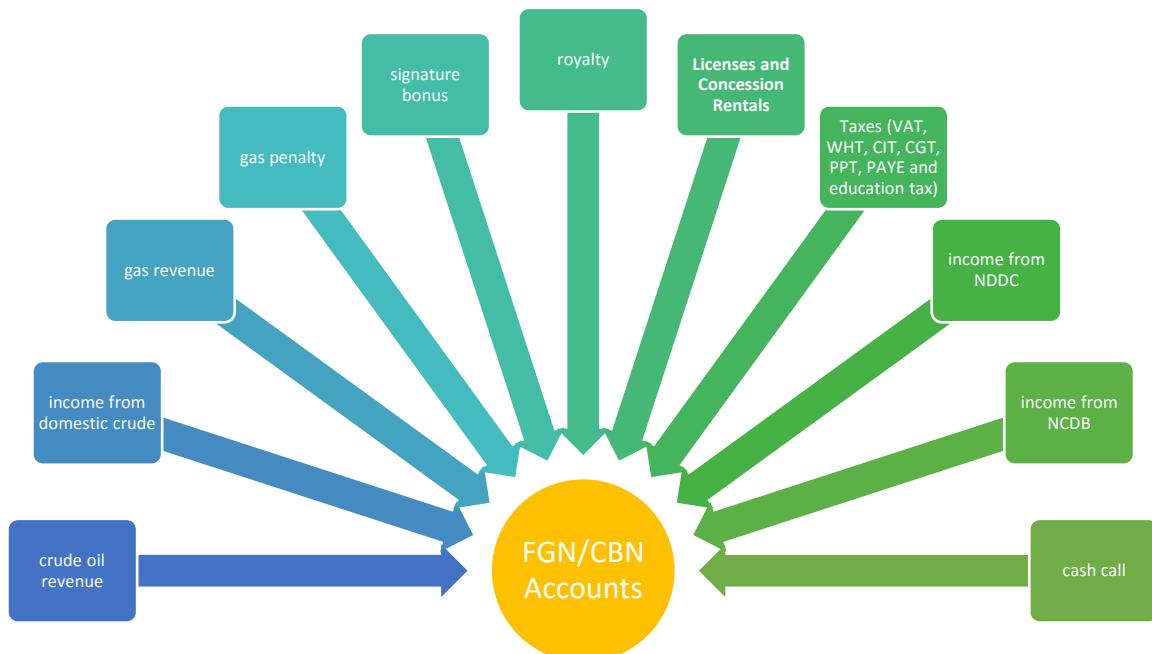
- I. Recording of transactions
- II. Receipting of transactions

In order for the relevant agencies to be transparent, all transactions must be recorded appropriately and against the accounts. Receipts must be given to the IOCs/LOCs once payment has been effected. Proper narration should always be made of every payment received by the bank to enhance easy and proper recording and accounting. We encourage that monthly reconciliation meetings be held between the Central Bank of Nigeria, the Oil Companies and the beneficiary revenue agencies to reconcile records of transactions. The Office of the Accountant –General of the Federation should put in place a formal structure to monitor the financial contributions from the Oil Companies to the Niger Delta Development Commission (NDDC) and Nigerian Content Development and Monitoring Board (NCDMB).

8.8.2 Financial Flows

The financial flows received by the Government from the covered entities are illustrated below:

Figure 8.8.2A - Financial flows



The payment flows are received from various agencies (FIRS – taxes, DPR – royalty oil and gas, signature bonuses, concession rentals, gas flare penalty, miscellaneous) and IOC's. A further description of the figure is stated below:

- **Income from domestic crude oil**

The Income is realised from the sale of unrefined crude allocation for domestic refining. NNPC pays for domestic crude allocated in Naira at a converted export crude price using CBN exchange rate on the day of invoicing. Unrefined crude in excess capacity are sold and proceeds received into NNPC Account.

- **Federation crude oil income**

The revenue proceeds are from the sale of crude oil and gas by the NNPC to international oil market. Proceeds are received in United States Dollar. This flow is reported by the Central Bank of Nigeria which is the receiving entity since payments are made to it on instruction of the foreign customer.

- **Taxes**

- Petroleum profit tax

Petroleum Profit Tax is tax paid on profit generated by companies in the Upstream Sector of the oil industry. Petroleum Profit Tax is regulated by the PPT Acts of 2007. Petroleum producing operators like Joint Venture Companies, Production Sharing the Companies and other oil producers are first two statutorily required to prepare estimate of their income with the first two months and to forward the same to the Federal Inland Revenue Services. The agreed estimate of tax is payable in twelve equal monthly instalments.

- Company income tax

Company Income Tax is tax paid on profit arising from gas operations of companies. Oil and Gas companies pay Company Income Tax in United States Dollar, on profit arising from gas operations.

- Value added tax

This is consumption tax that is placed on a product whenever value is added at a stage of production and at the point of Sales. The rate of Value Added Tax is currently five percent (5%). Value Added Tax is paid by all covered entities in local and foreign currencies to the Federation Account with J.P. Morgan Chase Bank Domiciliary account with the Central Bank of Nigeria.

- Withholding tax

With Holding Tax is a government requirement for the payer for an item of income to withhold or deduct tax from payment, and pay the tax to the relevant government authority, the Federal Inland Revenue Services. Withholding tax is paid by all covered

entities in Naira to the State Government and in the USD to the Federation Account with the Central Bank of Nigeria.

- Pay as you earn (PAYE)

A Pay As You Earn Tax (PAYE) is a tax on Income of Employees on a monthly basis. The relevant deductions are paid by all covered entities in Naira or Dollar to the State Government to which they relate, as required by the specific State Personal Income Tax Act 2011 enactments as amended to date.

- Tertiary Education Tax

Education Tax Fund was created by an Act in the year 1993 for the funding of educational Institutions in the Country. The fund is provided through Tertiary Education Tax collected by the Federal Inland Revenue Service (FIRS) in accordance with Tertiary Education Trust Fund (Establishment, etc.) Act 2011.

Tertiary Education Tax is chargeable on assessable profit of petroleum companies at a rate of two percent (2%). The tax is an allowable deduction in computing an Exploration and Production (E&P) company adjusted profit.

- **Royalties**

This is a regular payment from the oil companies in the Upstream to the Federal Government in return for the right of access to the crude oil. Royalty is a sum of money paid by a holder of a concession to the Federation based on the value of quantity of oil extracted at the fixed percentage from time to time by the government. Department of Petroleum Resources (DPR) is the government agency that receives the amount paid as royalty.

- **Signature bonus**

The revenue is received at the time Oil Prospecting License is given to oil company. Payments are made to the Department of Petroleum Resources (DPR) designated account at the Central Bank of Nigeria for the allocation of oil blocks.

- **Licenses and Concession Rentals**

Oil and Gas companies pay concession Rentals as rent on oil blocks for which they have been granted concession. There are two categories of Rentals, which are:

- Oil Prospecting License (OPL)
- Oil mining Lease (OML)

The license is non-exclusive and is granted for a period of one year. It is renewable annually.

- **Funding Niger Delta Development Commission**

The Niger Delta Development Commission is a Federal Government Agency established in the year 2000, with the sole mandate of developing the oil rich Niger Delta region of

Southern Nigeria. In September 2008 the Niger Delta Ministry was formed and it became a parastatal under the ministry.

Presently, there is three percent (3%) Statutory Contribution required from upstream companies to the NDDC based on their Annual Budget. The Act establishing the NDDC provides that in addition to monies from the Federal Government, it has to be funded by annual contributions of the total budget of any oil producing company, operating on-shore and off-shore in the Niger Delta area of the country. Contributions are made in both foreign and local currencies to the commission.

- **Funding of Nigerian Content Development and Monitoring Board (NCDMB)**

The Nigerian Content Development and Monitoring Board is the Regulatory Agency vested with the responsibility of regulating local content in the oil and gas industry in Nigeria. The Board was established by the Nigeria Oil and Gas Development Act which applies to all operators in Nigeria Oil and Gas Industry, including Exploration and Production and Services Companies.

The board is funded by the Federal Government of Nigeria and by the Upstream Companies through remittance of one percent (1%) Statutory deductions from any contract awarded to any operator, contractors, sub-contractors alliance partners or any other entity in any project operation activity in any transactions in the upstream sector of the Industry.

- **Cash call**

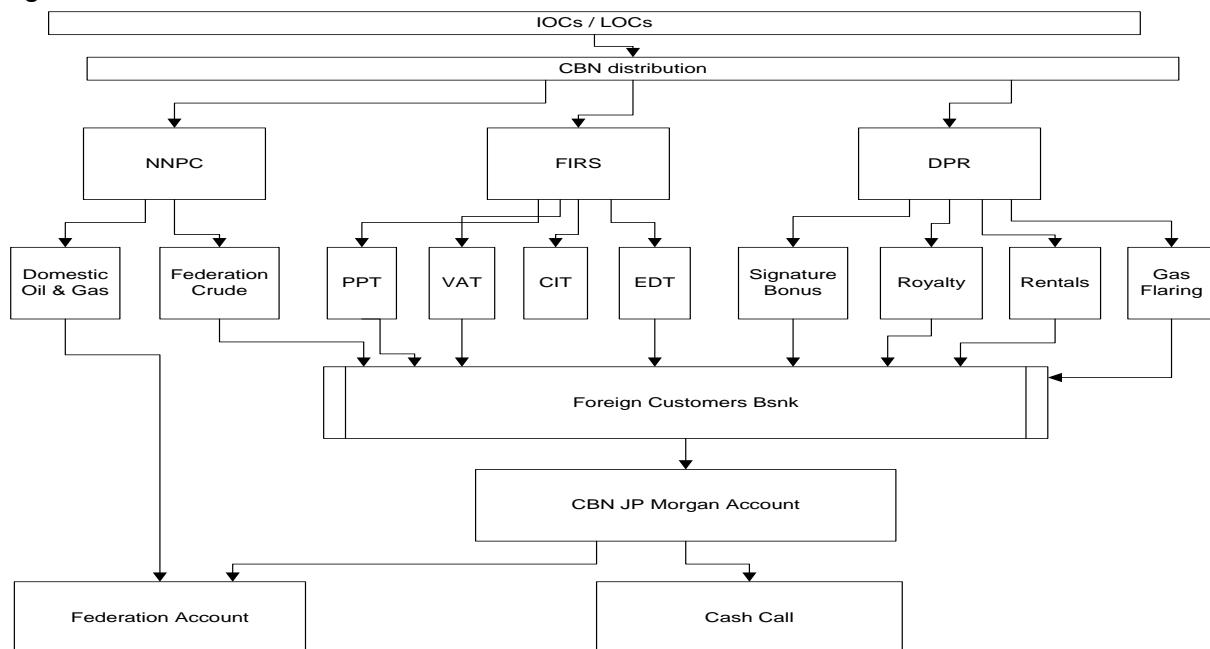
This is cash advance payment required to be paid by each Joint Venture operating company to meet up with the cash operation requirements of the Joint Venture. The Nigeria National Petroleum Corporation pays on behalf of the Nigerian Government in its Joint Venture Agreement.

The payment is made on monthly basis for each of the financial year. This only applies to the Joint Venture between NNPC and the Joint Venture Operators.

Payments are made to the Joint Venture Operators both in local and foreign currencies by NNPC on behalf of the Federal Government.

The financial transaction flow can be illustrated in the diagram below and a further description of the entities processes will be described further in the next section (8.9):

Figure 8.8.2B - Financial transaction flow



8.9 Systems and processes for paying/receiving entities

The procedures for paying for royalty, tax etc. are described below (according to the respective agencies :

8.9.1 Department of Petroleum Resources (DPR)

Department of Petroleum Resources (DPR) started as a Hydrocarbon Section of the Ministry of Lagos Affairs in 1947.

The Department of Petroleum Resources (DPR) was created as a Department in the Ministry of Petroleum Resources with the excision of the Petroleum Inspectorate of the NNPC upon commercialization in 1988.

Its mission statement is stated as “To ensure the sustainable development of Nigeria’s Oil and Gas resources across the value chain for our stakeholders through effective regulation, while entrenching world class professionalism, accountability and transparency”.

DPR has the statutory responsibility of ensuring compliance to petroleum laws, regulations and guidelines in the Oil and Gas Industry. The discharge of these responsibilities involves monitoring of operations at drilling sites, producing wells, production platforms and flow-stations, crude oil export terminals, refineries, storage depots, pump stations, retail outlets, any other locations where petroleum is either stored or sold, and all pipelines carrying crude oil, natural gas and petroleum products.

DPR, as the regulatory body in the Oil and Gas Sector, is vested with powers by various legal provisions to discharge the following functions:

- Supervise all petroleum industry operations being carried out under licenses and leases in the country
- Monitor the petroleum industry operations
- Enforce health safety and environmental regulations and ensure that those operations conform to national and international industry practices and standards.
- Maintain records on petroleum industry operations, particularly on matters relating to petroleum reserves, production and exports of crude oil, gas and condensate, licenses and leases as well as rendering regular reports on them to Government.
- Advise Government and relevant Agencies on technical matters and policies which may have impact on the administration and control of petroleum.
- Process all applications for licenses so as to ensure compliance with laid-down guidelines before making recommendations to the Minister of Petroleum Resources.
- Ensure timely and adequate payments of all rents and royalties as at when due.
- Monitor Government Indigenization policy to ensure that local content philosophy is achieved.
- Maintain and administer an effective repository for archiving and retrieval of all oil and gas data in Nigeria.
- Administer and manage oil and gas acreages and concessions in Nigeria.
- Implement all policies of government on oil and gas matters.

8.9.1.1 Classes of revenue received by DPR

DPR operates a Cashless Revenue Collection System. All the Revenue collected by the DPR is done either by Bank Drafts or direct wire transfer by the Oil companies into FGN accounts domiciled with the CBN.

DPR computes revenue due to the FGN using the reconciled field production figures. Companies are also allowed to do self-assessment, effect payments and advice DPR accordingly. Companies are allowed sixty days to make monthly payments. The DPR receives pay advice from companies, confirms payment on the CBN Monthly JP Morgan Bank Statement and holds meetings with the companies to reconcile payments with the amounts due.

Various types of revenue are generated and collected by DPR on behalf of Federal Government of Nigeria namely:

- signature bonus
- concession rentals
- royalty on oil production
- royalty on gas sales
- gas flare penalty
- miscellaneous oil revenue

8.9.2 Signature bonus

This is the premium paid on account of concession granted the winner of an oil block to express interest in the concession. The payment of signature bonus is made directly to the FGN designated Accounts as advised by the OAGF. Payments are usually made either by US Dollar drafts or wire/telegraphic transfer. The Accounts to which payments have been made include:

- CBN/FGN Independent Revenue accounts with JP Morgan Chase Bank, New York, USA
- CBN/AGF FGN account with JP Morgan Chase Bank NY, USA
- Consolidated Revenue Fund (CRF) account with CBN

Finding: There were no Bid Rounds in the period covering 2013.

8.9.3 Concession rentals receipt procedures

Concession Rentals are described in section 8.8.2 above .

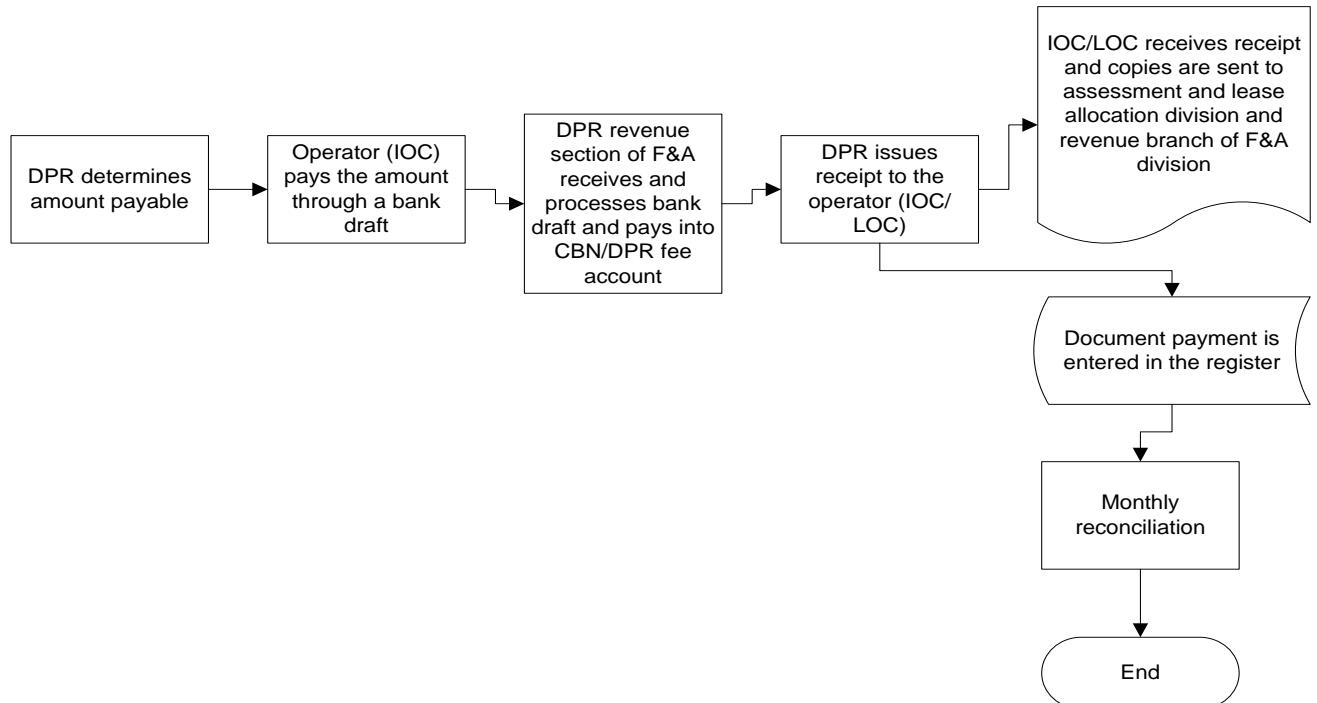
The license is non-exclusive and is granted for a period of one year. It is renewable annually.

The applicable rental rates are;

- OPL - US\$10/SQ KM or part there Off (Non-Producing Block)
- OML - US\$ 20.00/SQ KM or part there Off (up to 10 years of Conversion) and US\$15.00/SQ KM or part there off (until the Expiration of the Lease)

Concession rentals are paid either on the anniversary of the concession or in advance. It is usually paid either in Naira or US Dollars. The process is depicted in the diagram below:

Figure 8.9.3 - Concession rentals process



8.9.4 Royalty on oil

Royalties originated in the United States of America, and takes the form of a percentage production which is payable in cash or in kind (Crude Oil) at the option of the host country. The purpose of royalties is to provide the owner of the subsoil with a steady income in compensation for the irreplaceable loss resulting from the exploitation of non-renewable reserves.

In the Nigerian Oil Industry, Royalty refers to payments, either in cash or in kind, made by a holder of a concession to the Federation based on the value of the quantity of Crude oil or Gas produced (saved after the oil has been separated from its components) from the field within the concession in line with the fiscal terms approved statutorily by the Government.

Royalty payment is a statutory obligation of every corporate body involved in the production of Oil and Gas. It is guided principally by the Petroleum Act of 1969 as amended by Cap 10 Volume 13 Law of Federation of Nigeria (LFN) 2004.

The Petroleum (Drilling and Production) regulations Act No. 69 LFN of 1996 Section 60 stipulates that Royalty on crude oil and casing head petroleum spirit is computed by applying the appropriate rate of royalty to the chargeable value of crude oil and casing head petroleum spirit under the regulation. Calculation of chargeable oil as provided in the 1996 regulation Act is as follows: -

- a) ascertaining the quantity of crude oil produced on a field by field basis in the relevant OML; and
- b) reducing that quantity by the deduction of:
 - o Quantities used for production operations
 - o Quantities used for re-injection.
 - o Quantities lost through evaporation.

The above Act Interpretations (section 63) also explains that "casing-head petroleum spirit" means any liquid hydrocarbons which

- c) have been obtained from natural gas by natural separation or by any chemical or physical process; and
- d) have not been refined or otherwise treated;

From the above it can be inferred that Royalty is calculated on net crude oil produced on a field by field basis.

Finding: During the course of our audit we were made to understand that the Department of Petroleum Resources (DPR) interprets this to mean that royalty is assessed on net crude oil production after removal of associated gas, water, sediments and other impurities.

The calculation and payment of royalty on oil is guided principally by Section 61 of the 1969 Petroleum Act as amended.

Royalty (R) = V*P*R

Where:

R =	Royalty rate (depending on the terms and terrain)
V =	Production volume
P (Crude oil price)	Official selling price (OSP) or releasable price (RP) as adjusted by API gravity of the crude oil
=	

Note: the royalty paid is also determined by the operating contract.

8.9.5 Royalty on gas

Royalty on gas is based on gas sales. Royalty on gas sales refers to the sum paid by the holder of a Concession to the Federation based on the volume of gas produced and sold from the fields within the concession in line with the following fiscal terms:

- a) Onshore 7% of gas sale
- b) Offshore 5% of gas sale

8.9.6 Gas flare penalty

This refers to the amount paid for flaring gas in Nigeria (it is a penalty). The regulations governing gas flare penalty include:

- a) Regulation 42 of the Petroleum (Drilling and Production) Regulations, 1969.
- b) Associated Gas Re-injection Act, 1979.
- c) Associated Gas Re-injection (Continued Flaring of Gas) Regulations, 1984.
- d) Cap. 26 Laws of the Federation of Nigeria, 1990.

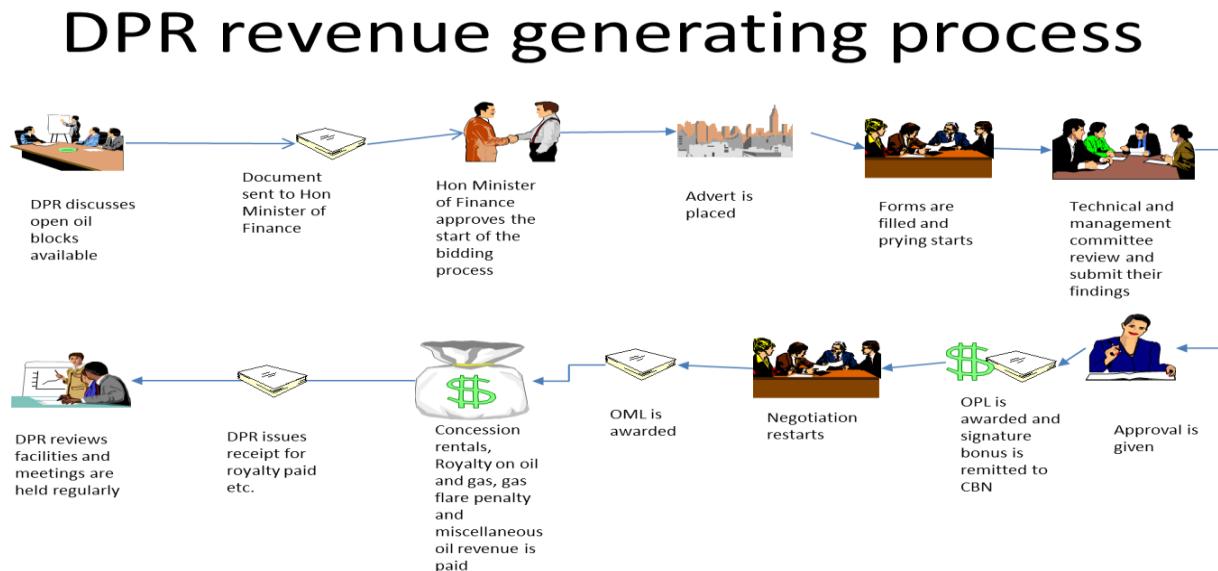
Gas flare penalty rates used under various fiscal regimes are:

- a) 2K applicable from 1985 to June 1992
- b) 50K applicable from July 1992 to December 1997
- c) N10 applicable from January 1998 to March 2008
- d) \$3.5 applicable from April 2008 to Date (still in contention)

The rate of N10 as provided by the Regulation of January, 1998 is still being applied. We understand that lack of political will on the part of Government to uphold the April 2008 Regulation may be responsible for the non-implementation. The companies complete a Self -Assessment based on the parameters in the Act and make monthly payments to the designated JP Morgan Accounts which are subsequently reconciled with the DPR after receipt of calculations from the fields.

8.9.7 DPR process

Figure 8.9.7 - DPR high level process



Note:

DPR computes royalties due to FGN, using the reconciled field production data, API and crude oil prices advised by NNPC. Companies are allowed the option of performing a self-assessment of royalty due and to effect payment within 60 days of production and advice DPR accordingly. DPR receives the payment advice from companies which includes swift copies and confirms payment with the CBN/JP Morgan Chase Bank statements. DPR issues receipts to covered entities for all revenue received. DPR undertakes quarterly reconciliations with producing companies to ascertain differences if any. Operational penalty fees are charged when payments are not made when due.

8.10 National Petroleum Investment Management Services (NAPIMS)

National Petroleum Investment Management Services (NAPIMS) is the Corporate Services Unit (CSU) and the Exploration and Production (E&P) Directorate of the NNPC. It is charged with the responsibility of managing the Nigerian Government's investment in the upstream sector of the Oil and Gas industry. The operators in the relationship are:

- Shell Petroleum Development Company (SPDC)
- Mobil Producing Nigeria Unlimited (MPNU)
- Chevron Nigeria Limited (CNL)
- Total Exploration and Production Nigeria Limited (TEPNL)
- Nigerian Agip Oil Company Limited (NAOC)
- Pan Ocean Oil Company Limited (POOCN)

NAPIM's objective is to enhance the margin accruing to the Nigerian Federal Government through effective supervision of the Joint Venture Companies (JVCs), Production Sharing Companies (PSCs) and Service Companies (SCs). It aims to achieve its objective through adequate supervision of budgets and performance, as well as ranking of projects that give higher "returns on investment" to the Nigerian government.

8.10.1 NAPIMS processes – cash call process

Cash calls are based on the annual work programme (AWP) of each joint operation and covers such diverse areas as exploration, drilling, production, development, construction, engineering facilities, technical materials, for both crude oil and gas, in addition to administrative overheads, referred to as OPEX.

On receipt of the cash call, NNPC summons a meeting of the cash call processing committee where unacceptable items of cost are rejected and the net value accepted by the committee is signed by all parties i.e. NNPC and other partners including the operator. The IOCs are members of the cash call processing committee.

The work programme agreed in advance among the Joint Partners is approved by their operating committees (OPCOM) as provided in the JOA. The OPCOM is constituted in accordance with the JOA as the highest decision making authority and is charged with the overall supervision, control and direction of all matters pertaining to the joint operations.

Cash calls are initiated monthly by the JV operator and served on NNPC and other partners early enough to enable NNPC and all Partners including the operators to lodge their equity portions of the cash calls into the JV Dollar and Naira cash call bank accounts on or before the 1st day of the cash call month.

NNPC has prying and audit rights over all these Accounts, but the custody and transactional authority over these joint operating bank accounts rests with the operators.

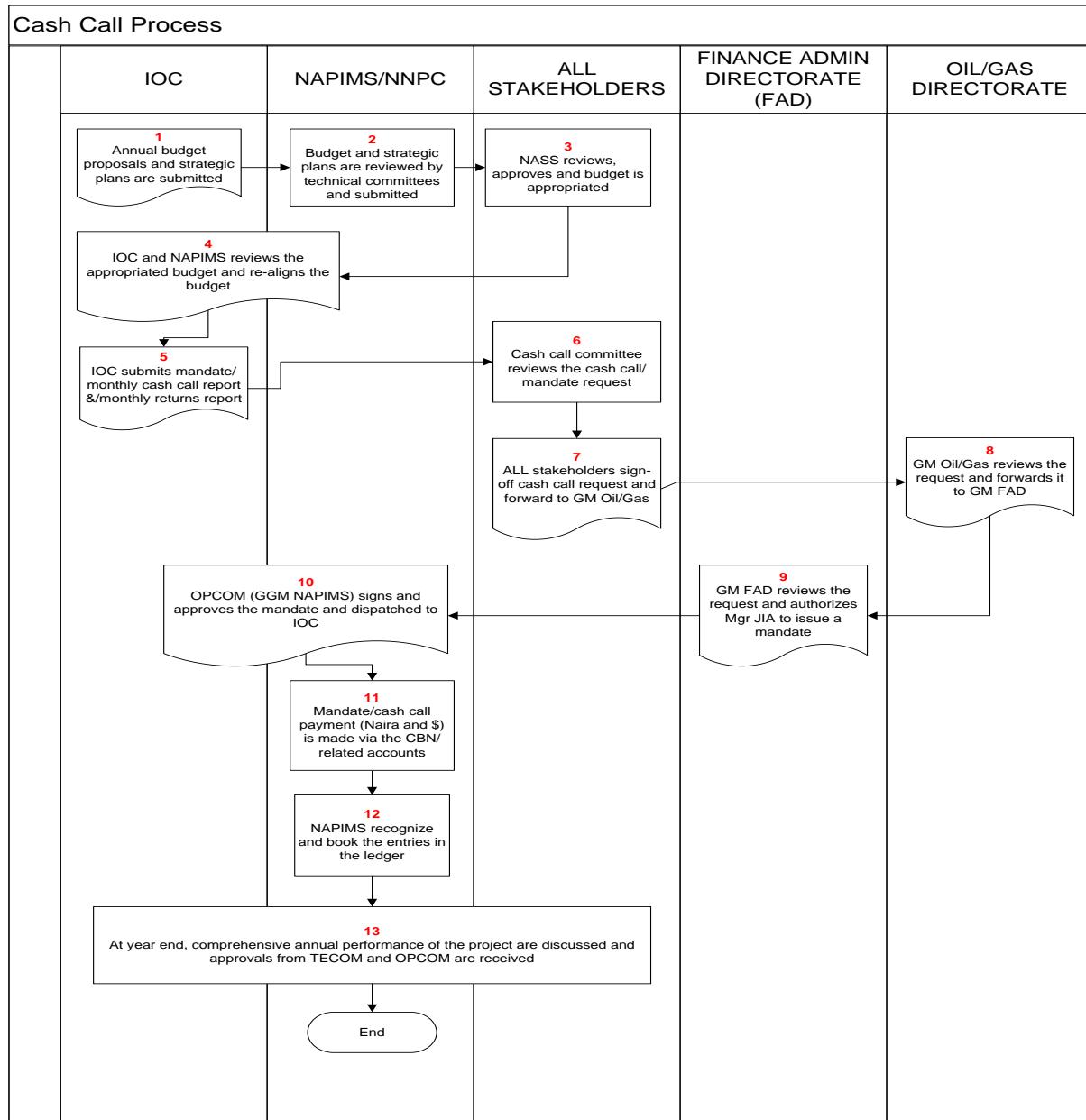
Based on the Annual Budget allocated for Joint Venture Operations as approved by the Government and communicated to NNPC by the Budget Office of the Federation, a portion of revenue realized from the sale of crude oil and gas is set aside for the payment of Cash calls by NAPIMS.

- a) Revenue from the sale of crude oil is paid into the JP Morgan Chase CBN/NNPC Crude Oil Revenue Account.
- b) Revenue derived from Gas and Feed Stock is paid into JP Morgan CBN/NNPC Gas Revenue Account.
- c) Funds from both Accounts meant for Cash Calls are subsequently paid into JP Morgan Chase CBN/NNPC JV Cash Call Payment Account.
- d) From the account in (c) above, CBN disburses Dollars to the Dollar Accounts of the JV operators as authorized by NNPC mandates. A second amount of US Dollars is monetized from same Account into Naira and paid into CBN/NNPC JV Cash Call Naira Payment Account and from there is disbursed into individual JV bank accounts maintained by the operators.

- e) The individual IOCs or JV partners will in turn pay their equity portion of the Cash Call into the JV Naira and Dollar Cash Call Account.

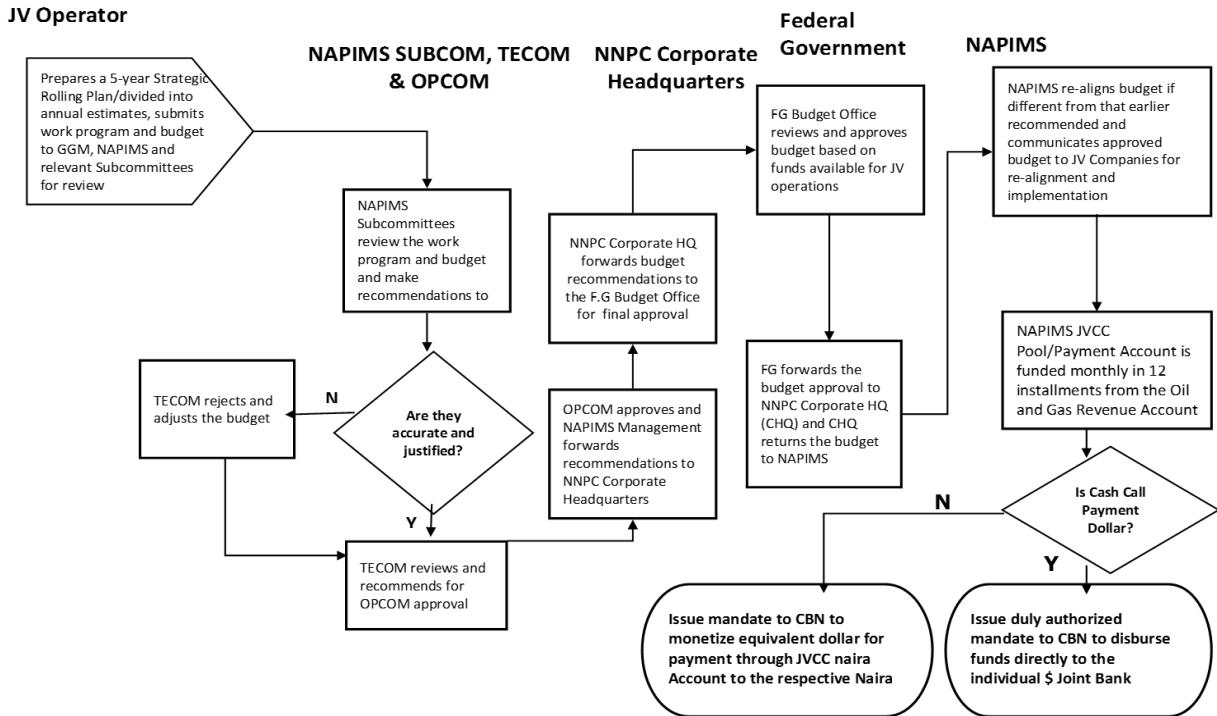
The summary of the cash call process is depicted in the diagram below:

Figure 8.10.1A - Summary of cash call process



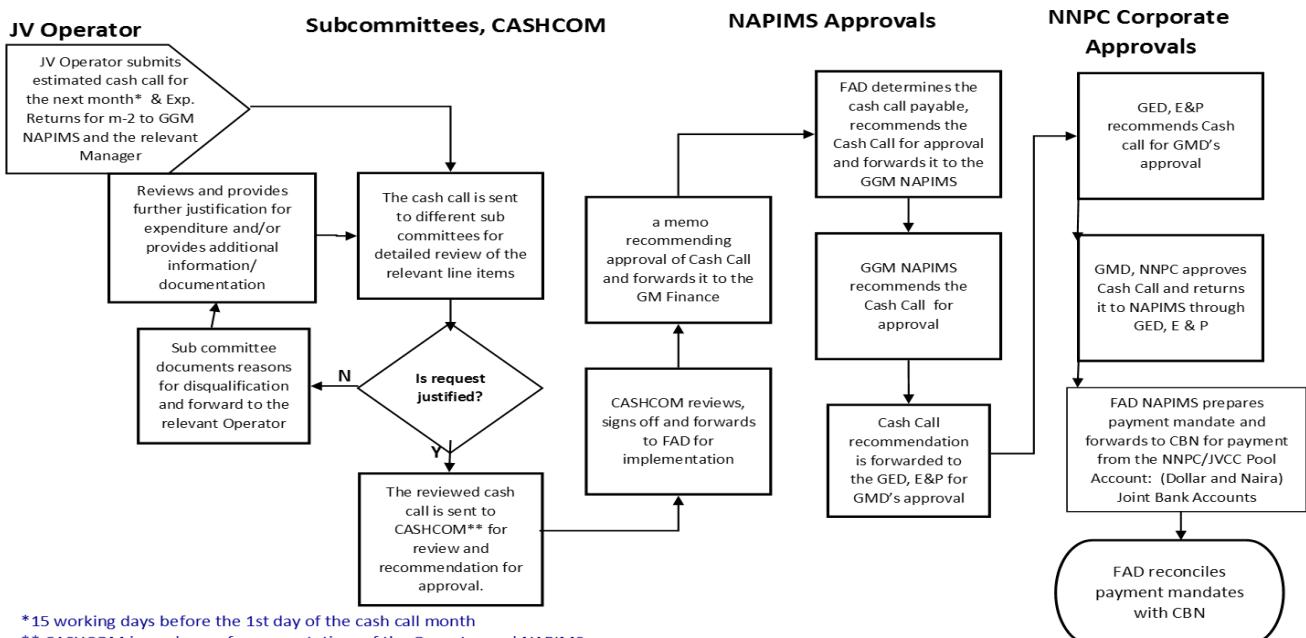
The cash call budgeting process can be depicted below:

Figure 8.10.1B - Cash call budgeting process



The cash call disbursement process is shown below:

Figure 8.10.1C - Cash call disbursement process



*15 working days before the 1st day of the cash call month

** CASHCOM is made up of representatives of the Operator and NAPIMS

8.11 Federal Inland Revenue Service (FIRS)

The Federal Inland Revenue Service (FIRS) is saddled with the following key responsibilities:

- Assessment and collection of Taxes
- Accounting for taxes collected and maintenance of tax records
- Enforcement of payment of taxes as may be due to the Government
- Review the tax regimes and promote the application of tax revenues to stimulate economic activities and development.
- Establishment and maintenance of a system for monitoring international dynamics of taxation in order to identify suspicious transactions and perpetrators and other persons involved
- Issuance of taxpayer identification number
- Advising the Federal Board of Inland Revenue on professional and technical tax issues referred to it

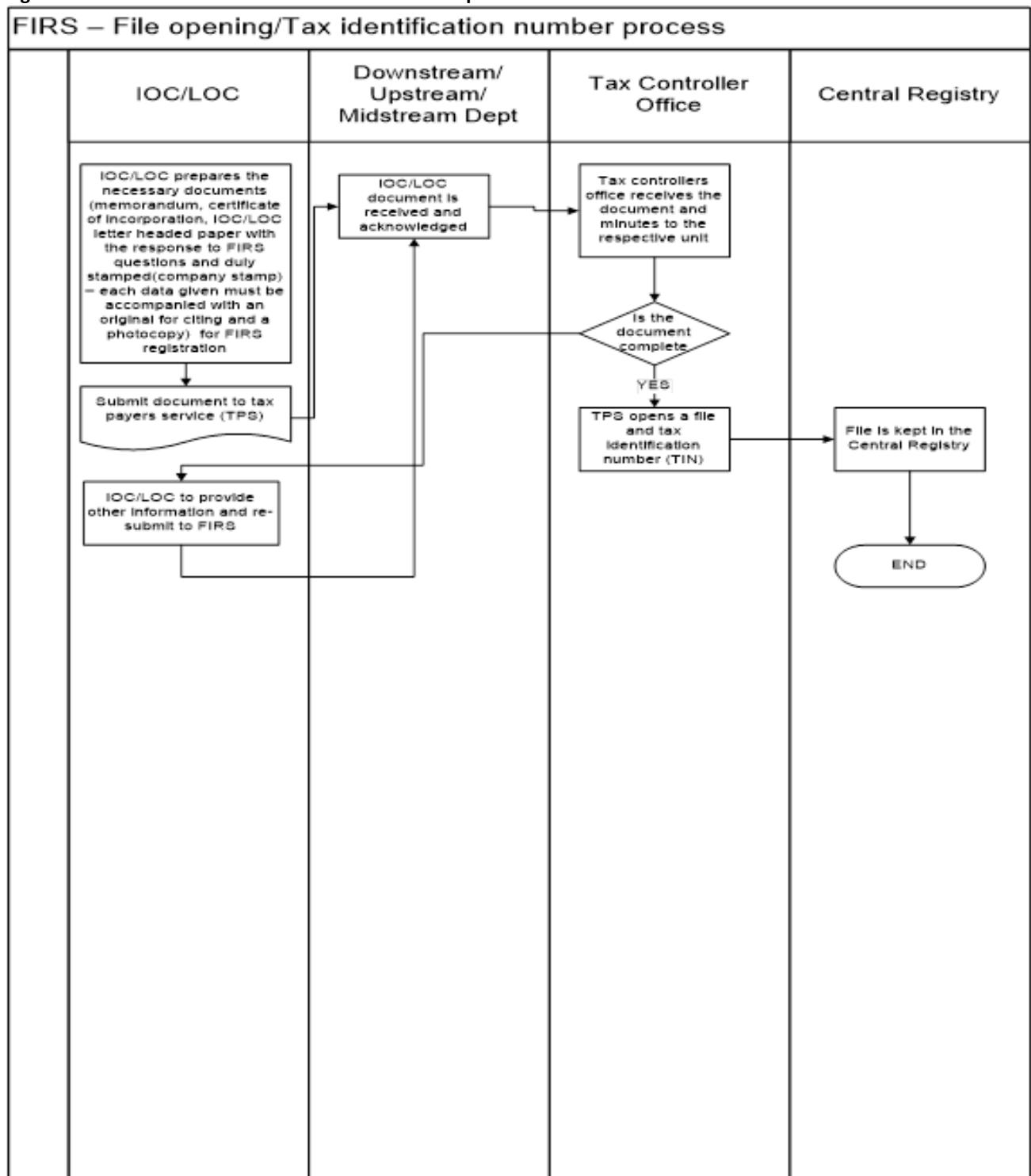
Taxes with respect to the oil and gas industry is handled by three major departments/sections of FIRS:

- Upstream
- Downstream (for marketing companies)
- Oil Services

8.11.1 FIRS process- Tax identification number (TIN) process

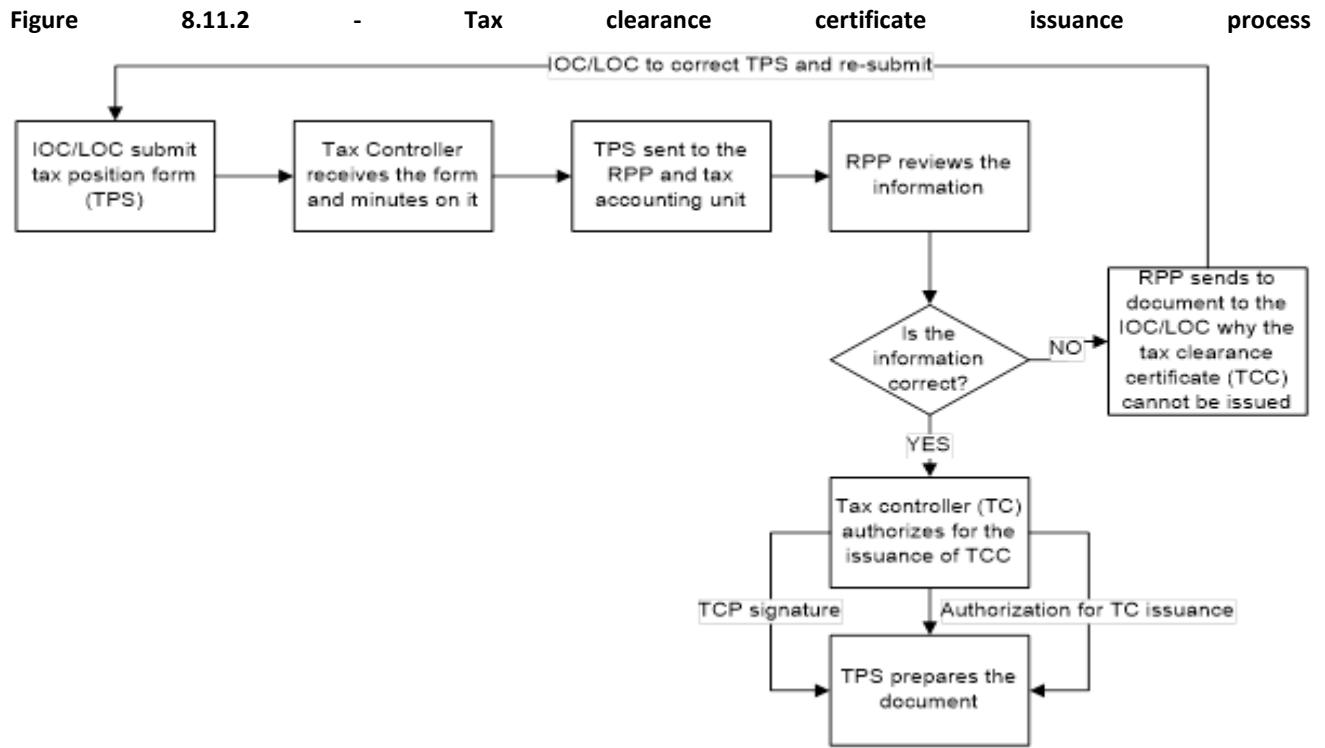
The tax identification is illustrated below:

Figure 8.11.1 - Issuance of tax identification number process



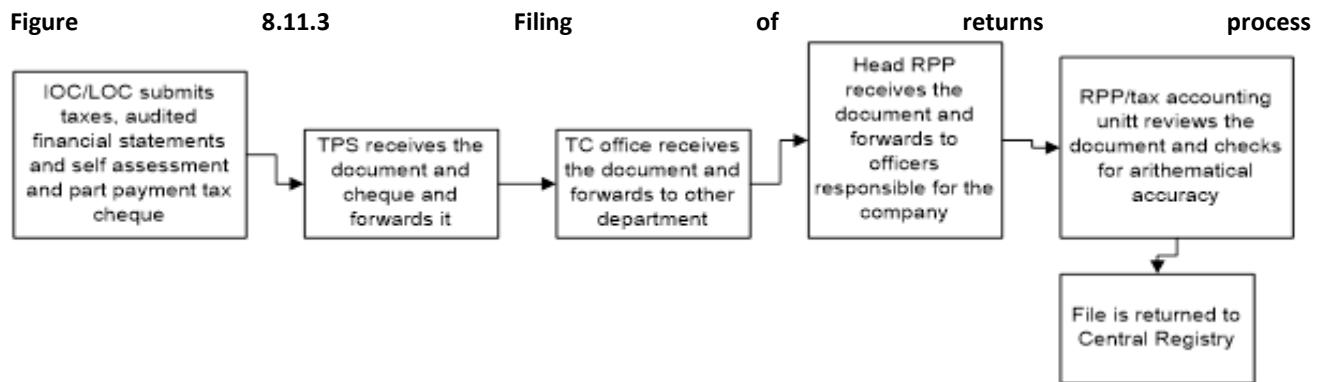
8.11.2 Tax clearance certificate issuance

The tax clearance issuance process is depicted the chart below:



8.11.3 Filing of returns

The filing of returns process is depicted in the chart below:



8.11.4 Tax monitoring

On a regular basis the various taxes are being monitored by the RPP unit. VAT (returns are expected by the 21st of every month) and WHT are being monitored too. The RPP unit reviews VAT returns and communicates to taxpayers.

8.12 Central Bank of Nigeria (CBN)

The Central Bank of Nigeria has full responsibility for the custody of Federal Government Fund. It is the Supreme Monetary Authority in Nigeria. It issues Nigerian naira currency, maintains foreign currency reserves and is charged with the responsibility for maintaining monetary stability. It is also the lender of last resort for Nigeria banks. It was established by law in 1958.

The CBN operates various accounts for the federation (on behalf of the relevant agencies) in-flows as shown in the table below:

Table 8.12 - CBN inflows account details (oil and gas sector revenue)

Government Agencies	Account description	Account details
NNPC NNPC operates Domiciliary Accounts with JP Morgan Chase Bank New York USA in the Central Bank of Nigeria (CBN) where revenue payments from the sales of Export Crude Oil and Gas to foreign Customers are paid and received. Nigerian National Petroleum Corporation (NNPC) Crude Oil Marketing Department (COMD) make Sales of Crude Oil and Gas to Foreign Customers, issues invoices to their foreign banks in line with terms of Letter of Credit, and payment is received within 30 (Thirty) days.	NNPC/CBN Crude Oil and Gas Revenue (Export) Account	000000400941775
	NNPC/CBN Gas Revenue Account	000000816296438
	CBN/JV Cash Call Account	000000011658366
The following accounts were in operation during the 2013 Audit Year. All payments were received in United States of America (USA) Dollar. The accounts and records were maintained by the Foreign Operations Division of the CBN Banking and Payment Systems Department.		
NNPC- The Revenue proceeds arising from the sales of Domestic Crude Oil and Gas by the Crude Oil Marketing Department (COMD) of Nigerian National Petroleum Corporation (NNPC) was also maintained by the Central Bank (CBN) Banking Operations Department of the Banking and Payment Systems. The accounts were called NAIRA ACCOUNTS. All transactions were made and recorded in Naira.	NNPC/CBN Domestic Crude Oil Revenue Account	0020157141024
	NNPC/CBN Gas Revenue Account	20157141105

Government Agencies	Account description	Account details
DPR It maintains JP Morgan Chase Bank New York with CBN for the collection of revenue i.e. signature bonus etc.	CBN Joint Venture Royalty	000000802906875
	CBN Production Sharing Contract Royalty	000000802906883
	CBN Gas Flared Penalty	000000802906909
	CBN Concession Rentals	000000802906917
	CBN Miscellaneous Oil Revenue	000000802906925
	CBN Gas Royalty	000000802906891
	CBN Signature Bonus	000000753811397
FIRS It maintains JP Morgan Chase Bank New York with CBN for the collection of taxes	FIRS/Petroleum Profit Tax	000000400216647
	FIRS/Companies Income Tax	000000400216620
	FIRS/Value Added Tax	000000400216698
	FIRS/With Holding Tax	000000400216639
	FIRS/Education Tax	000000400216728

8.13 Office of the Accountant General of the Federation (OAGF)

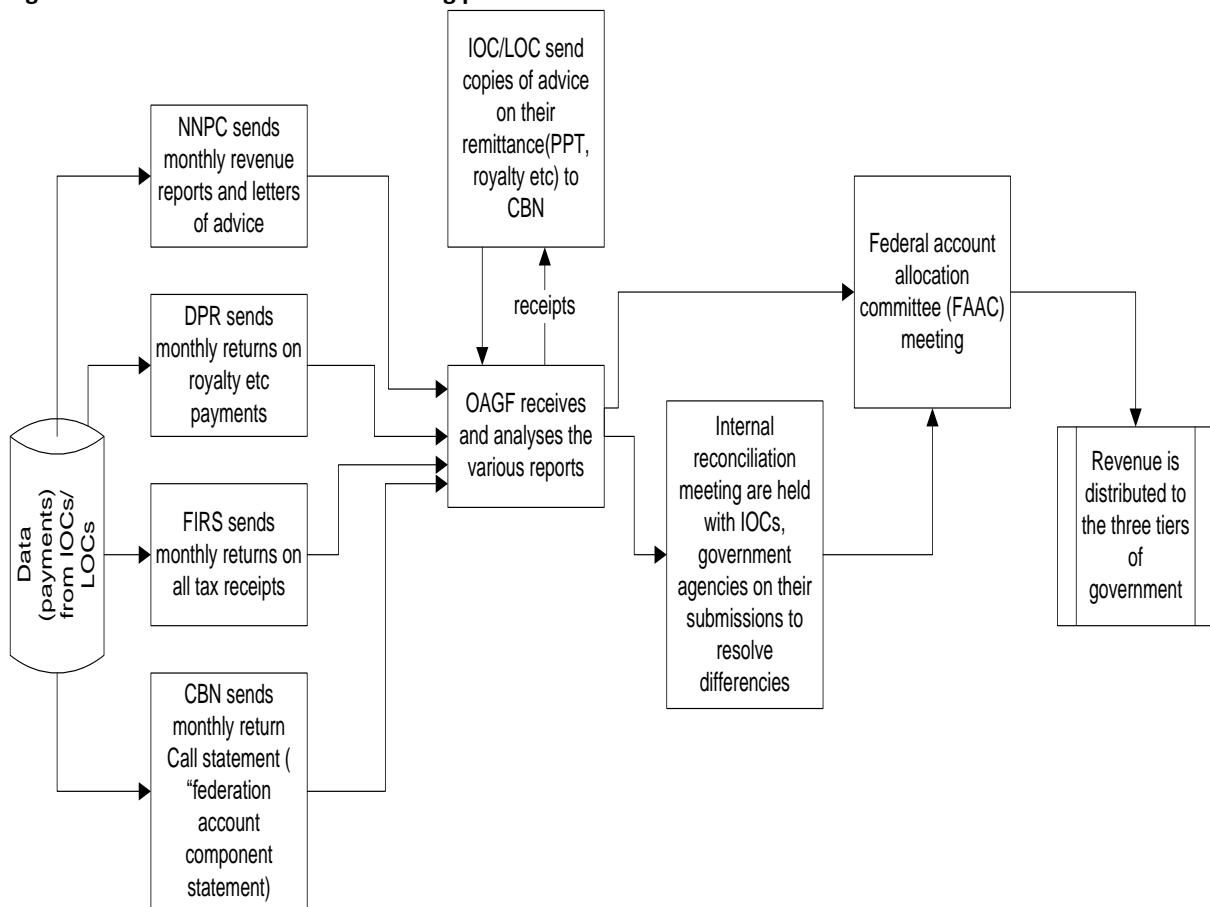
The Office of the Accountant General of the Federation (OAGF) was established for Treasury Management of Government. It has responsibility for providing adequate accounting systems and controls in the ministries, extra ministerial offices and other Arms of Government. The office also has the mandate of collating receipts and reporting on revenues of the Federal Government derived from Sec. 80(1) of the Constitution 1999 which stipulates that “All revenues or other money raised are received by the Federation (not being revenues or other moneys payable under this constitution or any Act of the National Assembly into any other public fund of the Federation established for a specific purpose) shall be paid into and from one Consolidated Revenue Fund of the Federation.”

The Accountant-General of the Federation (OAGF) is the Chief Accounting Officer and he is charged with the constitutional role of preparing the nation’s financial statements arising from collection and receipts of income, fees, rentals and taxes and payment out of the Federation Account. Accordingly Sec 85 S.5 of the Constitution provides that, “the Auditor-General shall, within ninety days of the receipts of the Accountant-General’s Financial Statement, submit his reports under this section to each House of the National Assembly responsible for public accounts”.

The office of the Accountant-General of the Federation (OAGF) is the executive arm of Government responsible for maintaining records for all revenues and receipt and payments into and out of the Federation Account.

The OAGF transaction recording procedures can be depicted in the diagram below:

Figure 8.13 - OAGF transaction recording process

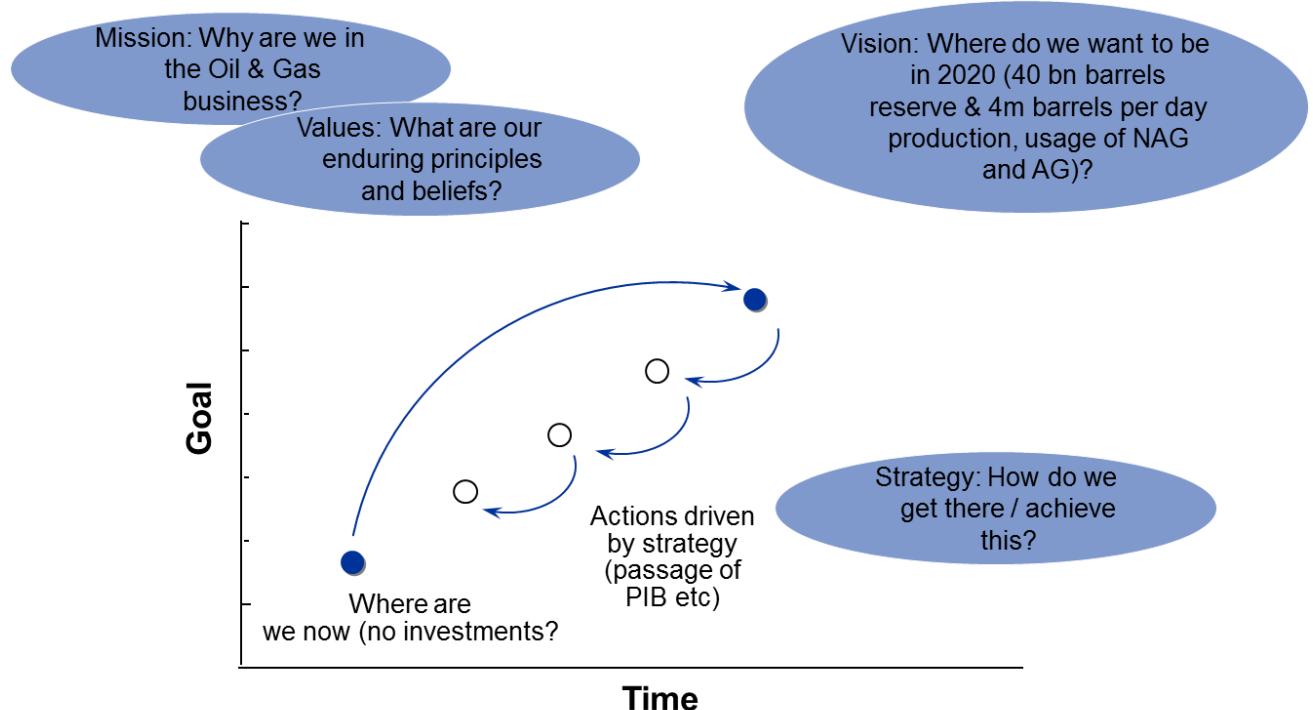


8.14 Framework for growth in the Oil and Gas Sector

At its simplest, the world will still want oil, though its demand profile will come under pressure and the price is unlikely to rise as much again as it has in the last decade. The world will also want a lot more gas, but as this is available the price may go down rather than up. As projects become both larger and more risky, there is an increased need for well-functioning partnerships (for both risk management and access to funding). What is clear is that a 'do nothing' option is only delaying the inevitable.

The framework for growth cannot be overemphasized; see below:

Figure 8.14 - Framework for the Oil & gas sector

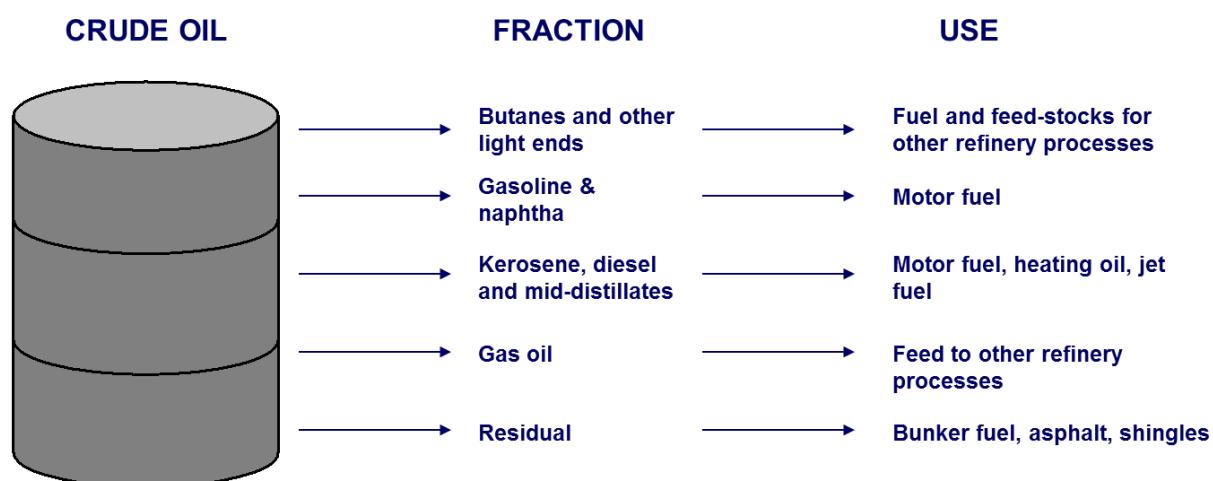


The diagram above is self-explanatory. A lot can be done depending on the sincerity of the leaders of the country.

The future growth of this industry will come from investments in new assets, technology and people which invariably depends on the policies that will be set in place by the government.

Other bi-products of crude (ethanol, bitumen) should be fully exploited; see the diagram below (from a barrel of crude):

Figure 8.14B - Bi-products from a barrel of crude



Gas should be exploited more aggressively as this invariably assists to boost the current power supply in the country. Private sector should be encouraged. Biofuels investments should be encouraged. The future is ours if we do the right thing beginning with privatization of NNPC and the passage of the PIB into law.

8.14.1 Method for Pricing of Federation Equity Crude

In order to achieve the term of reference of the NEITI audit, the review covers both the **direct and indirect** factors responsible for achieving market driven and optimal crude oil pricing setting and revenue generation to the federation.

8.14.1.1 Direct Factors – Methodology for Pricing of Nigerian Crude Oil

Find below the issues identified as direct factors for pricing, with a direct impact on the revenue accruable to the Federation.

8.14.1.1.1 Pricing Philosophy

The team reviewed the adoption of three pricing options by the NNCP-COMD. Crude oil buyers are given the option to elect one of the three pricing options within six days of the BOL date.

We were not given any studies or review to justify the adoption of the above pricing option or why other pricing options could not be considered by NNCP-COMD, such as an average of 30 days before the BOL date, or 30 days after the BOL date, or 30 days average during the month of lifting.

As a part of our review, we are still expecting responses from COMD with respect to the date the pricing policy was approved, and by whom.

Implication

We believe that the Federation could be losing substantial revenue if the policy adopted by NNPC is not reviewed on a consistent basis to reflect market conditions. The current pricing policy need to be reviewed considering the latest market conditions i.e within the African continent only, the increase of competitive threats, as traditional producers like Angola are ramping up production and new oil producers, namely, Ghana, Ethiopia, Kenya, Uganda, Tanzania and Mozambique have entered the market. Onshore exploration activities are also ongoing in Senegal, Gabon and other African markets.

Recommendations

We recommend the following:

- The adoption of any pricing policy by NNPC should be supported by rigorous and empirical studies. This pricing policy should be approved by the Federal Executive council on the recommendations of a committee that has technical, marketing and commercial awareness of Nigeria crude oil traded and sold worldwide.

- The policy should be reviewed on a regular basis to reflect current market conditions.

8.14.1.1.2 Compliance Testing on the Application of the Pricing Option

Performance test on the application of the three pricing options carried out during the year in accordance with the requirement of the TOR.

Compliance/Consistency test was carried out on the application of NNPC's pricing methodology on crude oil (export as well as domestic) lifting transactions and observed that the pricing methodology was consistently applied on the export crude sales except for twenty-one (21) transactions out of the total transactions of two hundred and Nineteen (219) domestic crude oil transactions that failed the test (**Appendix 8.14.1.1.2**), and this resulted in a shortfall of **3.2 billion naira (\$20.8m)** from the twenty-one (21) transactions.

Implication

Non-compliance by COMD's application of the adopted pricing option has resulted in a financial loss of **\$20.8m** to the federation.

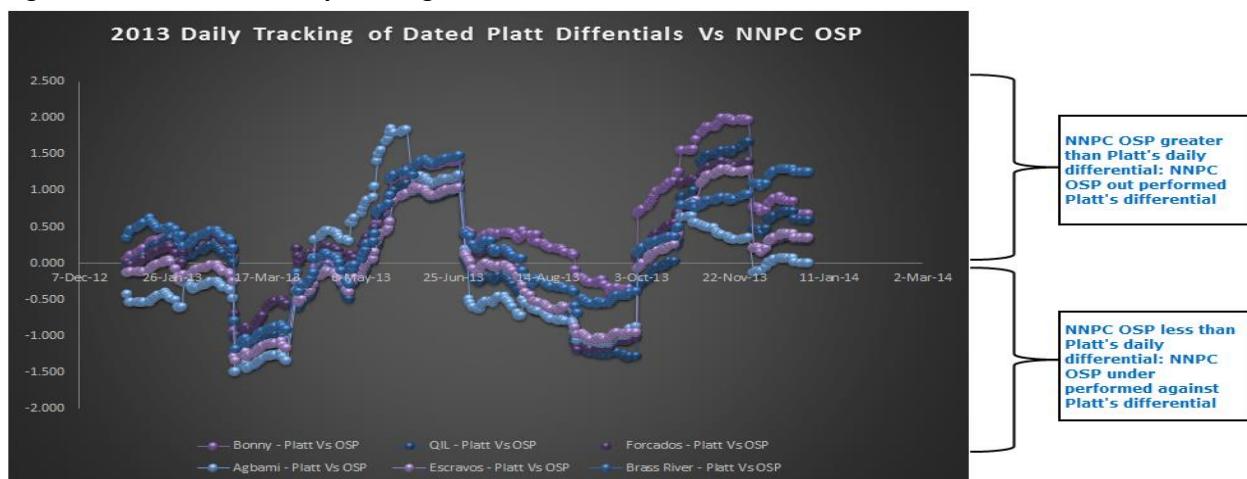
Recommendation

We recommend that the arithmetical accuracy and transparency of the pricing option elected should be reviewed by the Audit Department of NNPC and subsequently approved by senior management before the finalization of the invoice.

8.14.1.1.3 Actualization or benchmarking of OSP

COMD set the Official Selling Price (OSP) in advance of the following month crude sales. An actualisation or benchmarking exercise of the OSP against Platt's differentials was performed. The result presented below showed the difference between the OSP and Platt's daily differential:

Figure 8.3.3.1.3A – 2013 Daily Tracking of Dated Platt Differentials vs NNPC OSP



The above graph (**Appendix 8.14.1.1.3A**) showed the price differentials of Agbami, Brass River, Bonny, Escravos, Forcados and Qua Iboe grades highlighted mixed results.

Further analysis of the graph above shows that Escravos and Agbami grossly underperformed against Platt's daily differentials. In 2013, Escravos had 147 days (of 253 days) or 58% and Agbami had 138 days (of 253 days) or 55% wherein NNPC-COMD OSP is less than Platt daily differentials.

Performance Tracker - No. of days	Bonny - Platt Vs OSP	QIL - Platt Vs OSP	Forcados - Platt Vs OSP	Agbami - Platt Vs OSP	Escravos - Platt Vs OSP	Brass River - Platt Vs OSP
No. Days Differential Less Zero	27%	50%	29%	55%	58%	30%
No. of Days Differential Greater than Zero	73%	49%	71%	44%	41%	69%
No of Days Differential Equal to Zero	0%	1%	0%	1%	1%	0%
	100%	100%	100%	100%	100%	100%

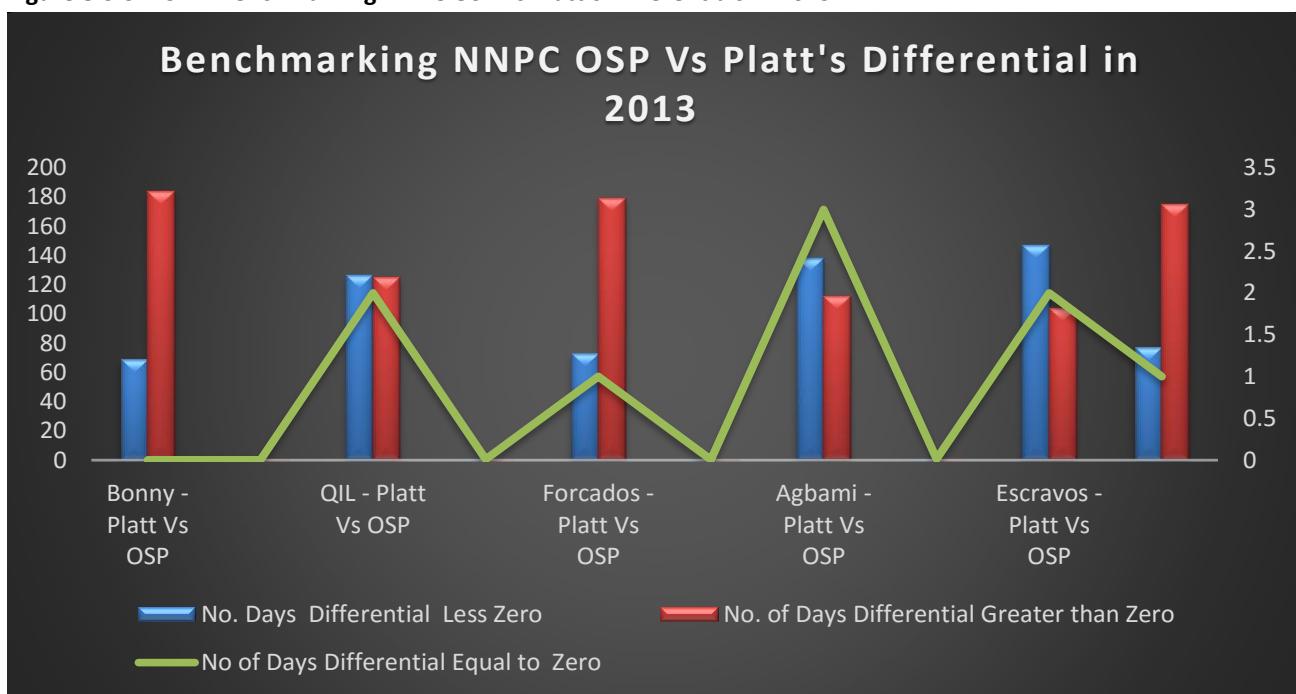
Keys

Differential Less than Zero : NNPC OSP Underperformed against Dated Brent Differential

Differential Greater than Zero : NNPC OSP Outperformed Dated Brent Differential

Differential Equal to Zero: NNPC OSP and Dated Brent Differential are equalised

Figure 8.3.3.1.3B – Benchmarking NNPC OSP vs Platt's Differentials in 2013



Implication

i. Underperformance of monthly OSP

From our sample reviewed, the underperformance of Agbami and Escravos monthly OSP has resulted to a shortfall of approximately \$2m to the federation.

Recommendation

We recommend that the monthly setting of OSP should be market driven and transparent for all grades traded by NNPC-COMD.

ii. Credit Terms

It was observed that the off-takers are granted a 30 days credit period to settle crude oil bills while the NNPC is granted 90 days. However, the NNPC does not strictly adhere to the 90 day credit period as it was also observed that payments were made in lump sum for all lifting transaction values on a monthly basis without due regard to the credit period allowed.

This practice led to aggregate default of 190days on the assumption that bill of lading dates (on aggregate basis) were the last day of the months, which is the worst-case scenario. From the audit review and validation carried out, no evidence of late payment penalty was made by NNPC as in the case with off-takers. See **Appendix 8.14.1.1.3B** for more details.

Recommendation

NNPC to adhere strictly to the 90 days credit period considering the economic loss that non-compliance is causing the country.

iii. Conflict of Interest

We observed that the NNPC acts as an agent to and sells crude oil on behalf of the Federation, but the NNPC is also a customer of Nigerian crude oil and sells crude oil for domestic refining to itself through one of its subsidiaries – PPMC. This confers unnecessary advantage to the NNPC in terms of selection of pricing options and when viewed against the fact that the NNPC hardly pays for crude lifting within the stipulated 90 days as against 30 days for other off-takers.

Recommendation

Federal Government should consider unbundling NNPC to allow the SBUs operate independently and on commercial basis like other participants in the Oil and Gas business.

NNPC Response

NNPC has been mandated to act as strategic reserve holder and supplier of last resort on petroleum products for the federation, with attendant social responsibility. In order to achieve this mandate NNPC minimizes losses which may be incurred due to storage costs, etc hence the need for PPMC to have the least pricing option than other off-takers.

8.14.1.1.4 Election of Pricing Options

From the table below, our testing showed that some crude oil buyers did not elect their pricing option, 6 days before the BOL date, as stipulated by the NNPC policy and the prompt pricing option would have been adopted, but a different pricing option was used.

Customers	Contractual Arrangements	Invoice Numbers	Quantity (bbls)	BOL Date	Date of Prices Options were Eleceted	Time Lag (6 days)	Price Option used to Calculate average price	Average using the wrong procng option	Price option sholud had been (<6 days)	New average using Prompt	Diff. per bbls	Diff. Value \$
TRAFIGURA BEHEER B.V.	NNPC Equity Lifting- PSC	COS/09/088/2013	50,000.00	30-Sep-13	27-Sep-13	(3.00)	Deferred	110.42	Promt	109.08	1.34	66,950.00
CALSON (BERMUDA) LTD	JV	COS/11/PPMC/041/2013	948,530.00	25-Nov-13	25-Nov-13	-	Advance	109.31	Promt	111.44	(2.13)	(2,015,626.25)
CALSON (BERMUDA)	JV	COS/12/PPMC/042B/2013	75,000.00	10-Dec-13	06-Dec-13	4.00	Deferred	111.25	Promt	109.16	2.09	156,525.00
AMG	NNPC-SNEPCO-PSC	FIRS/05/045/2013	50,000.00	17-May-13	13-May-13	4.00	Deferred	102.02	Promt	102.30	(0.28)	(14,000.00)
												1,806,151.25

Additionally, the election of the pricing of 159 crude oil transactions traded could not be validated with a cumulative volume of over **109m bbls**, due to lack of evidence validating the dates the pricing options were elected. See **Appendix 8.14.1.1.4**.

Implication

Non-compliance with NNPC-COMD pricing policy or crude oil traders acting in collision with NNPC-COMD personnel, resulting in a loss of approximately \$1.9m from the sample reviewed. This loss to the federation could be substantial if the total crude traded in 2013 were reviewed.

Recommendations

We recommend that all price elected by crude oil buyers should be supported by a valid audit trail. We also recommend the pricing option elected be sent to a department independent of COMD-NNPC (e.g. Audit Department) for review prior to approval.

NNPC Response

The cargoes referred to in Auditor's appendix 13 are injected cargoes. NNPC's Crude oil term contract Part I Article 7(L) allows buyer to elect pricing options even after the due date for option submission as long as it is cargo injection.

8.14.1.1.5 Tracking the Transparency of Electing a Particular Pricing Options

The transparency of COMD's current pricing policy is based on the fact that crude oil buyers should elect to choose particular pricing options within 6 days before the BOL date. The price elected must be supported by valid evidence or an audit trail of the choice made by a crude buyer. If a crude buyer fails to elect a particular pricing option or fails to elect a particular pricing option within the stipulated time, the prompt pricing option would be used to calculate the average price.

Market condition would greatly influence the particular options elected by a crude oil buyer. For the purpose of clarifications, let us make the following assumptions:

1. All crude oil buyers are rationale i.e. they will only elect the lowest pricing option at any particular trading window;
2. The bill of lading date is on the 14 April 2013. And , the days before and after the bill of lading days are all working days, no weekends and bank holidays;
3. We are faced with two market conditions, a consistent raising or falling daily crude oil dated Brent price.

These assumptions are tabulated below:

Working Days	Dated Brent (\$)		Pricing Options		
	Rising at a constant rate	Falling at a constant rate	Prompt / Default	Advanced	Deferred
08/04/2013	104.50	105.50			
09/04/2013	105.00	105.00			
10/04/2013	105.50	104.50			
11/04/2013	106.00	104.00			
12/04/2013	106.50	103.50			
13/04/2013	107.00	103.00			
BOL DAY					
14/04/2013					
15/04/2013	108.00	102.00	5 consecutive published quotations of Platt's Dated Brent price , with the fifth day BEFORE the Bill of Lading Day with the Bill of Lading date as Day one.	5 consecutive published quotations of Platt's Dated Brent price , with the fifth day BEFORE the Bill of Lading Day with the Bill of Lading date as Day one.	5 consecutive published quotations of Platt's Dated Brent price , with the fifth day BEFORE the Bill of Lading Day with the Bill of Lading date as Day one.
16/04/2013	108.50	101.50			
17/04/2013	109.00	101.00			
18/04/2013	109.50	100.50			
19/04/2013	110.00	100.00			
20/04/2013	110.50	99.50			

The analysis of the table above showed the price average of a rising or falling crude oil price and the average prices for prompt or advanced pricing option:

Scenarios	Averages (\$)	
	Prompt / Default	Advanced
Rising at a constant rate	109.25	106.00
Falling at a constant rate	101.00	104.00

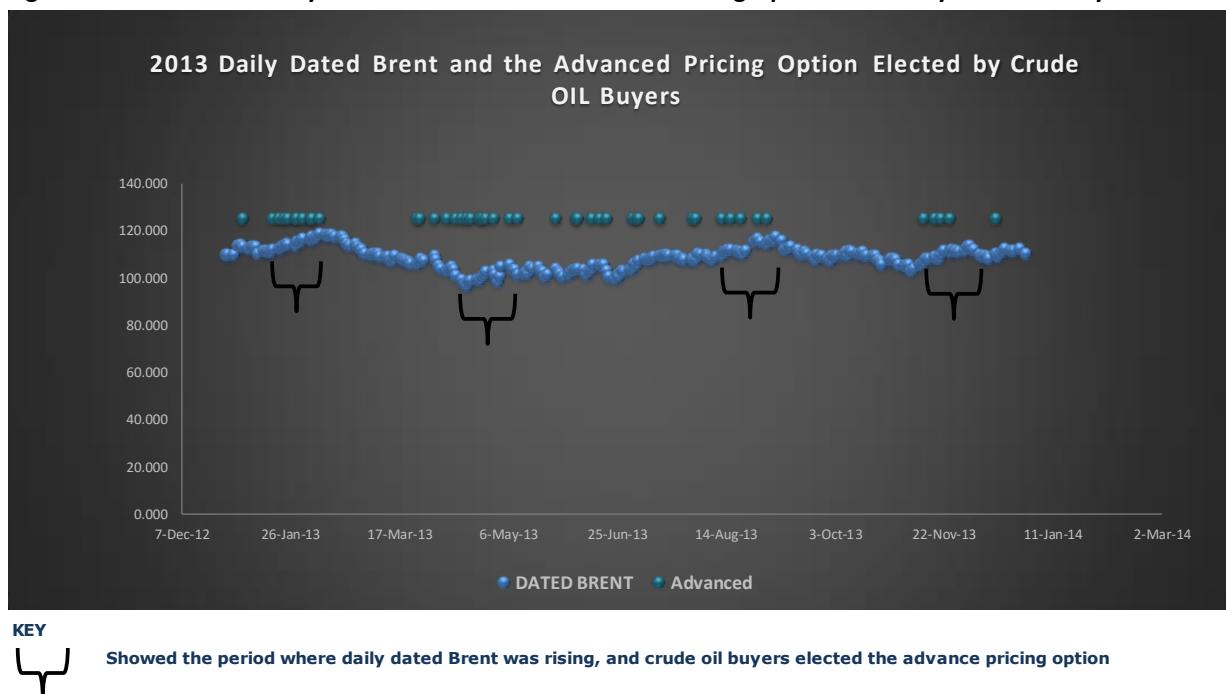
It is clear from the above analysis that a rational crude oil buyer would elect a particular pricing options depending on the market conditions - a rising or falling crude oil price.

- When crude oil price is rising: In hindsight, a rationale crude oil buyer would elect the advanced pricing option of \$106, because it is lower when compared to prompt, \$109.25

- When crude oil price is falling: In hindsight, a rationale crude oil buyer would elect the prompt pricing option of \$101, because it is lower when compared to advance, \$104

Issue – the auditor used this assumption to analyse the pricing election of 2013 COMD crude oil sales. See the graph below:

Figure 8.3.3.1.5 – 2013 Daily Dated Brent and the Advanced Pricing Option Elected by Crude Oil Buyers



The above graph showed that crude oil buyers, for example are electing to choose the advance pricing option, the lowest pricing options subject to market conditions i.e up trending crude oil price. However, this analysis would only hold true if the whole process is transparent i.e. pricing elections are validated by a supporting audit trail. The issue above demonstrates that this process is not transparent.

Implication

Non-compliance with NNPC-COMD pricing policy or in collision with NNPC COMD personnel, the federation could lose substantial revenue if the total crude traded in 2013 were reviewed. This is more worrisome as the audit could not validate the election of the pricing of 159 crudes oil transactions traded with a cumulative volume of over 109m bbls, due to lack of evidence validating the dates the pricing options were elected. **See Appendix 8.14.1.1.4.**

Recommendations

We recommend that all price elected by crude oil buyers should be supported by a valid audit trail. We also recommend that the pricing option elected be sent to a department independent from COMD-NNPC for review and in other to ensure control.

8.14.1.1.6 Other Crude Oil Grades Benchmarking or Differentials

Crude grade differentials are quoted and published by Platt on a daily basis.

Crude oil is priced based on differentials – the following differentials are provided by the NNPC-COMD, Bonny Light, Qua Ibo differentials, Forcados differentials, Agbami differentials, Escravos differentials, Brass River differentials. However, other blends or grades are traded by the NNPC, which are not quoted on Platt. These grades are as follows:

Crude Type Differentials Not Provided by COMD				
ABO	AMB	ERHA	UGHELLI	
AGBAMI	AMENAM	OKONO	USAN	
AKPO	ANTAN	OKWORI	YOHO	
AKPO	BONGA	OKWUIBOME	ZAFIRO	
PENNINGTON				

Implication

The market value of crude oil grades is principally driven by the quality of crude oil grades traded. There is a risk that NNPC-COMD could be trading higher grade for a lower differentials or premium if the grade is not quoted on Platt's publications. The federation could be losing several millions of dollars if higher quality crude oil grades are traded on a lower differentials or premium.

Recommendation

We recommend that all crude oil grade traded by NNPC-COMD should reflect the quality of the crude oil grade traded and where some of the grades are not quoted (as above), by platt's, these unquoted grades should be mirrored with quoted grade were the qualities are similar, for optimal price setting.

NNPC Response

Unpublished differentials are priced relative to similar grades based on quality, market, etc.

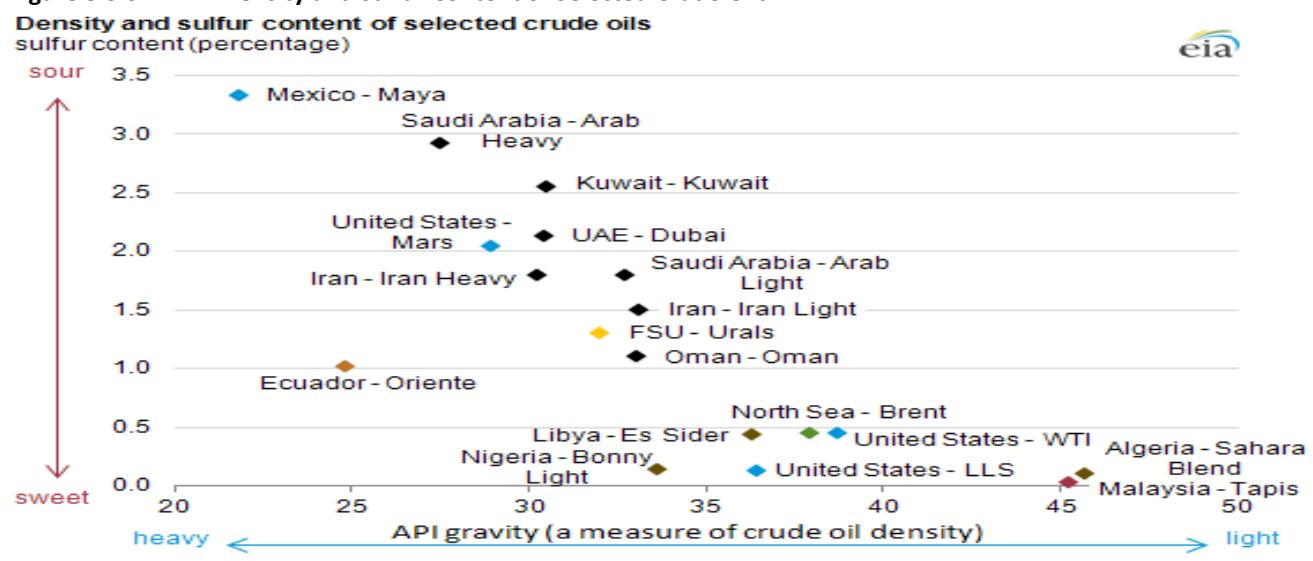
8.14.1.1.7 Tracking OSP against the Quality of the Crude

COMD set the Official Selling Price (OSP) in advance of the following month crude sales. In other words, the OSP should reflect the market value of each type of Nigeria grade.

The market value of an individual crude stream reflects its quality characteristics. Two of the most important quality characteristics are density and sulfur content. Density ranges from light to heavy, while sulfur content is characterized as sweet or sour.

Crude oils that are light (higher degrees of API gravity, or lower density) and sweet (low sulfur content) are usually priced higher than heavy, sour crude oils. The light sweet grades are desirable because they can be processed with far less sophisticated and energy-intensive processes/refineries.

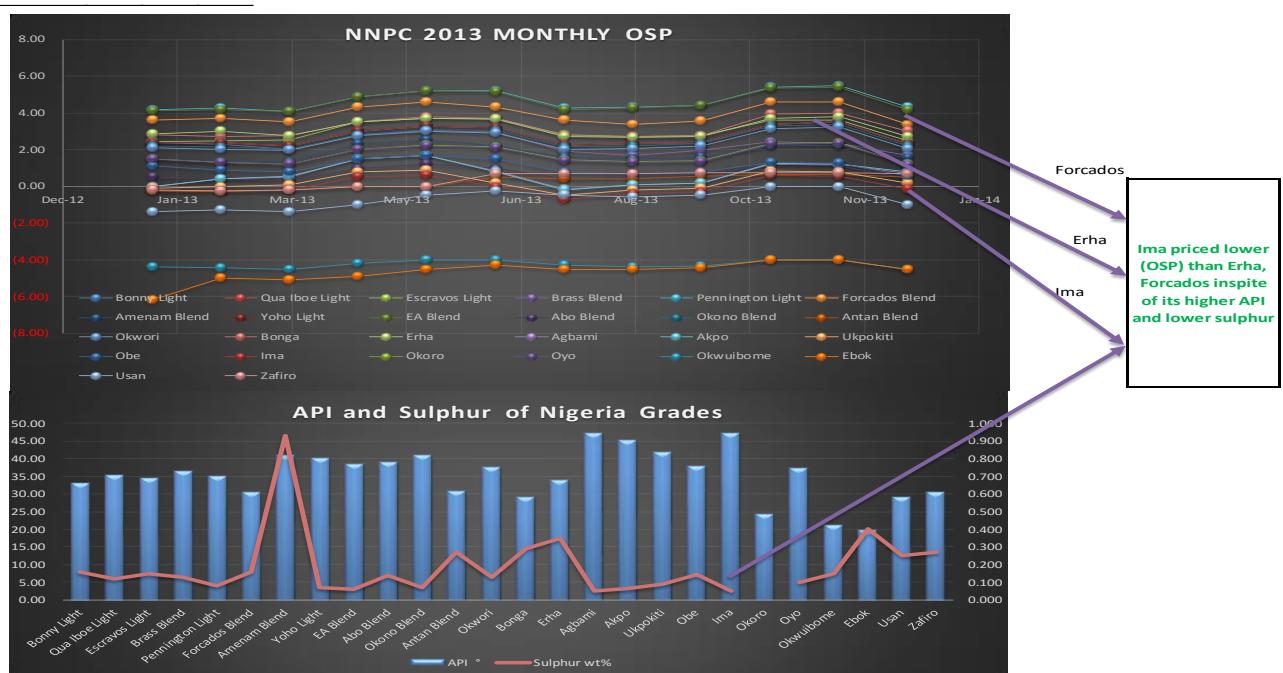
Figure 8.3.3.1.7A – Density and Sulfur Content of Selected Crude Oils



Sources – eia energy institute.

A review was conducted on NNPC-COMD monthly OSP compared against each crude grade quality. From the graph (A) below it was clear that EA blend and Pennington Light have the highest monthly OSP and Okwuibome and Ebok have the lowest monthly OSP.

Figure 8.3.3.1.7B – NNPC 2013 Monthly OSP



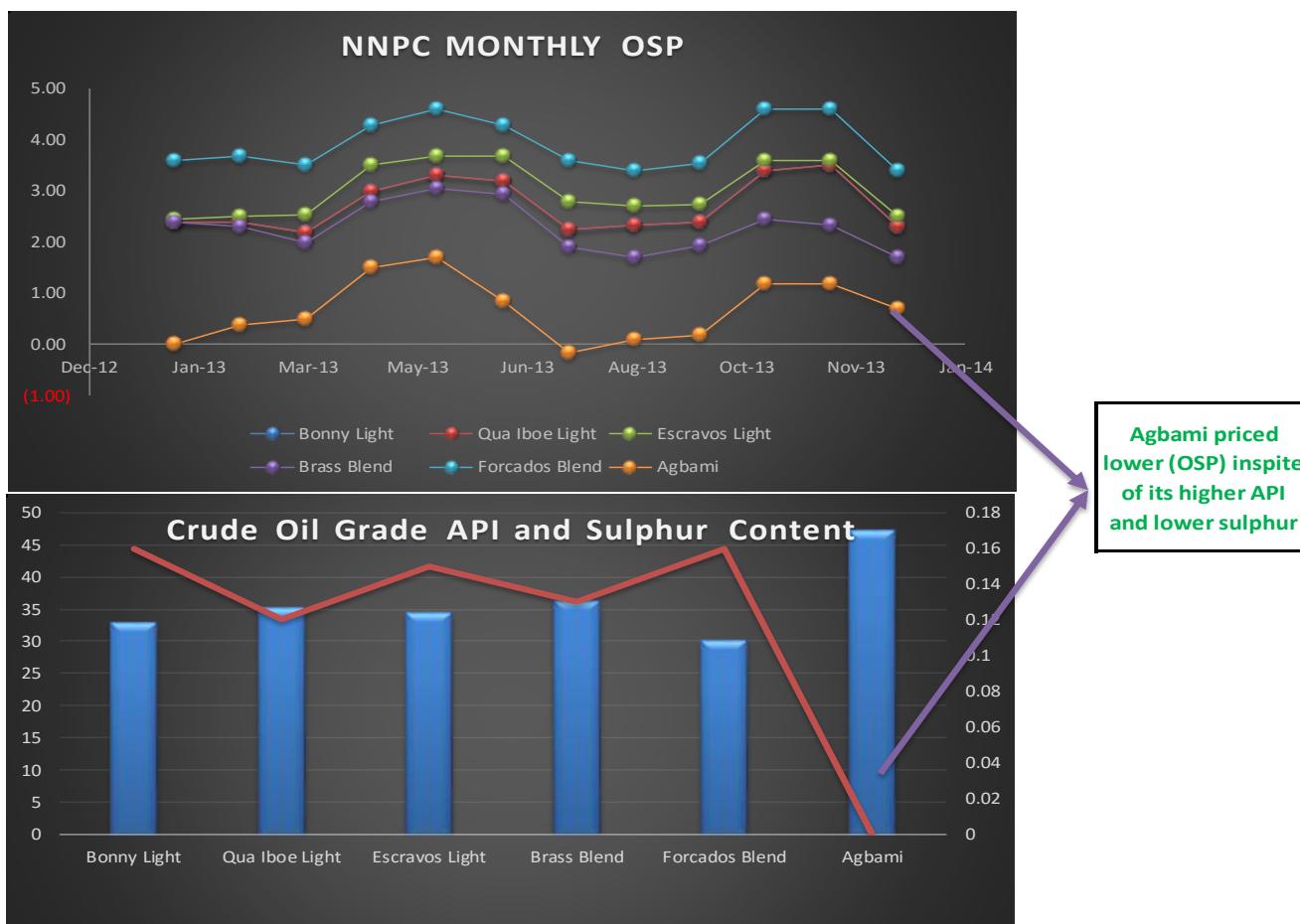
Source – NNPC Monthly OSP and Crude grade

As shown in the graph above, the higher the API (a measure of density), the lighter the crude. The lower the Sulphur (measure acidity), the sweater the crude. In other words, Crude oils that are light (higher degrees of API gravity, or lower density) and sweet (low sulfur content) are usually priced higher than heavy, sour crude oils.

From the graph above it was clear that Agbami, Apko, Ima, EA blend, Yoho Pennington Light for example have the higher API and low Sulphur – they are termed light sweet crude, and should be priced higher.

We identified the following issues with respect to the OSP. Our analysis of 2013 NNPC monthly OSP for Bonny Light, Qua Iboe, Forcados, Agbami, Escravos and Brass River against the quality of each grades as measured by the heaviness (API) and sweetness (Sulphur) of the each grade showed that, for example, Agbami was priced lower in spite of its higher API and lower Sulphur compared to Bonny Light, Qua Iboe, Forcados, Escravos and Brass River. See graphs below:

Figure 8.3.3.1.7C – NNPC Monthly OSP and Crude Oil Grade API and Sulphur Content



The same analysis showed that Ima priced lower (OSP) than Erha, Forcados in spite of its higher API and lower Sulphur (see graph A above).

Audit request was made to find out the methodology and studies adopted and carried out by COMD for setting the monthly OSP. This validation is key because the revenue generated by the Federation through NNPC is driven by the quality of crude traded by COMD. This request has not been honored.

Implication

This finding corroborates 1.1.6 above. The market value of crude oil grades is principally driven by the quality of crude oil grades traded. There is a risk that NNPC-COMD could be trading grade for a lower differentials or premium if the grade is not quoted on Platt's publications. The federation could be losing several millions of dollars if higher quality crude oil grades are traded on a lower differentials or premium.

Recommendation

We recommend that all crude oil grade traded by NNPC-COMD should reflect the quality of the quality of the crude oil grade traded and where some of the grades are not quoted (as above), by Platt's, these unquoted grades should be mirrored with quoted grade were the qualities are similar, for optimal price setting.

8.14.1.1.8 Sales and Purchase Agreement and Crude Oil Traders on the Master list

The auditors could not validate the crude traders in 2013, because we were not provided with the approved sales and purchase agreements of all the crude oil traders.

Based on the 2013 approved crude oil buyer list provided by COMD, the following traders below appeared in the COMD crude oil sales but not in the approved list:

Republic of Ghana (TEMA), Republic of Zambia (SARB), Sierra Leone (Sahara), SINOPEC and PTT.

Implication

If the selection and approval of NNPC crude oil traders are not transparent, there is the risk that these traders will lack the capacity and capabilities to trade the federation oil.

Recommendations

We recommend that the process of selecting and approving crude oil traders be transparent more transparent with a valid approval as well as Sales and Purchase Agreements in place for each crude oil trader. We also recommend that an audit right be included in the Sales and Purchase Agreements.

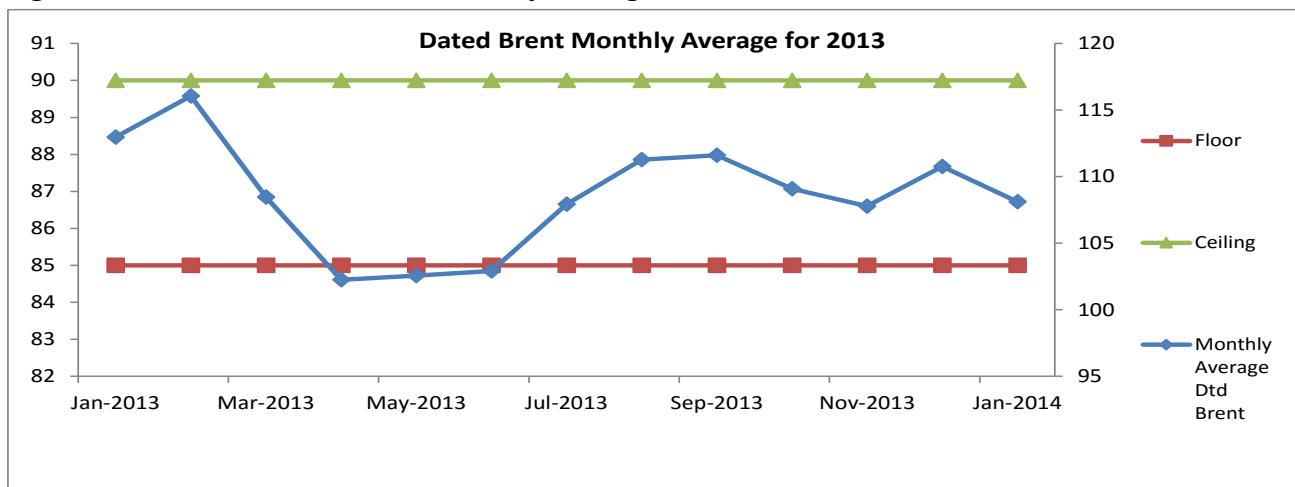
8.14.1.1.9 Pricing Structure for the Sale of Nigeria Crude

It is instructive to note that NNPC –COMD traded and marketed approximately 240mm bbls in 2013 through Sales and Purchase Agreements with different crude oil traders. Crude oil is traded to buyers on the basis of three different pricing options elected by off-takers.

There are however, other different pricing arrangements COMD should review and adopt. These options could be;

- Spot sales
- Engaging reputable crude oil traders to source for buyers through a tendering process for crude oil price differentials
- Adoption of Contract of Different strategy (CFD)
- Futures or hedging contracts

Figure 8.14.1.1.9 – Dated Brent Monthly Average for 2013



From the graph above, the average dated Brent crude oil prices in 2013 rose as high as US\$116.05 per barrel in February 2013 and as low as US\$102.25 in April 2013. If the federation crude oil sale is hedged, the federation will be guaranteed a floor or ceiling crude oil price irrespective of the market conditions- this is dependent on the hedging arrangements.

Implication

The Federation would be exposed to unexpected financial losses if there is crude oil price volatility. Hedging as a risk management process would ensure some level of predictability of cash flow generated into the federation accounts.

Recommendations

NNPC-COMD should consider starting a hedging program for Nigeria crude oil sales. The NNPC-COMD can consider hedging in parts - for example 10% to 20% of daily productions like some other oil producing countries.

8.14.1.2 In Direct Factors - Methodology for Pricing of Nigerian Crude

The auditors carried out a data analysis of the COMD customer list and COMD populated template data.

The data analysis are detailed below:

Crude Oil Buyers Categorisations

Based on the list of buyers provided by COMD, the list of COMD buyers are categorised as:

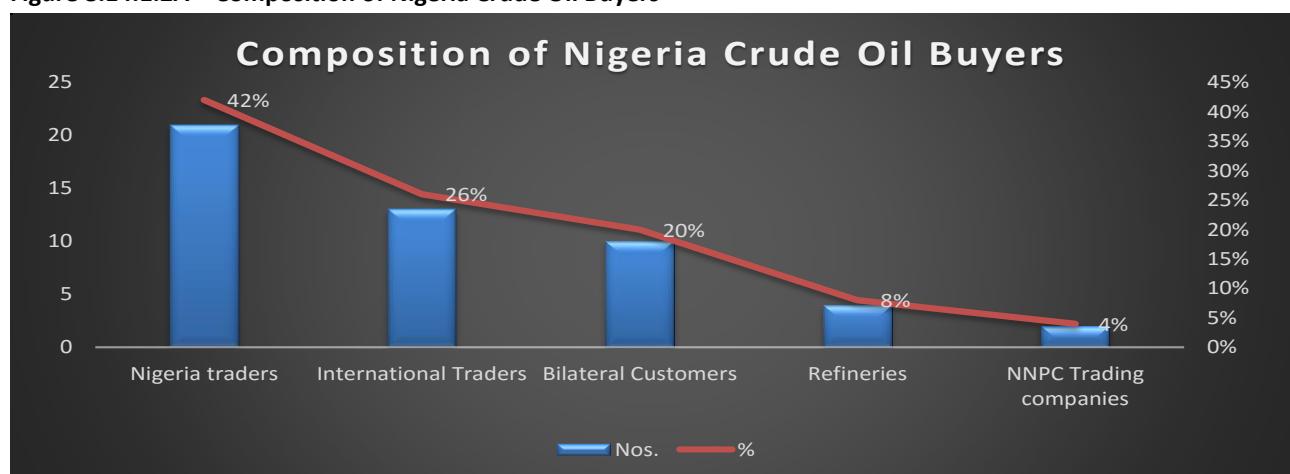
Table 8.14.1.2A – List of COMD Buyers

Traders	Descriptions	Nos.	%
Nigeria traders	These Oil traders are local Nigeria companies.	21	42%
International Traders	These oil traders are classified as international companies , they are mostly based in Switzerland.	13	26%
Bilateral Customers	They are countries or National Oil companies of countries with whom NNPC through COMD trade crude oil.	10	20%
Refineries	These oil traders can be classified as the end users. They include a few foreign refineries.	4	8%
NNPC Trading companies	NNPC has subsidiaries with whom COMD also trade crude oil with .	2	4%
TOTAL		50	100%

Source : COMD - Crude Oil Customers, address and contact information

From the graph below, Nigerian traders accounted for 42% (21 of 50) of the total traders, the highest allocation. On the other hand, NNPC subsidiaries accounted for 4 % (2 of 50), the least.

Figure 8.14.1.2A – Composition of Nigeria Crude Oil Buyers



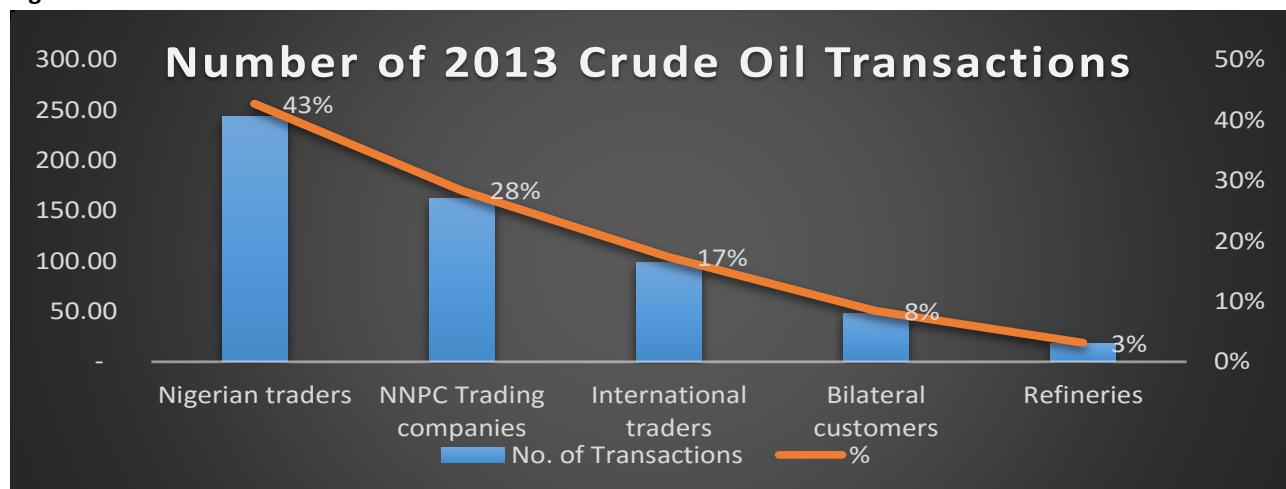
Value and Quantity of Crude Oil Traded in 2013

In actual terms based on the 2013 data from COMD (see Appendix 8.14.1.2), the total quantity of crude oil traded was 245,214,991 bbls, valued at \$26, 992,993,809.32. These quantities and values traded were generated by the 571 transactions in 2013.

Number of Transactions of Crude Oil Traded in 2013

From the graph below, Nigerian traders accounted for 43% (244 of 571) of the total number of crude oil transactions, the highest numbers of allocations. Refineries, however, accounted for just 3% (18 of 571) of the number of crude oil transactions, i.e. the least.

Figure 8.3.3.2B – Number of 2013 Crude Oil Transactions



Volume of Crude Oil in Bbls Traded in 2013

From the graph below, Nigerian traders accounted for 44% (108,084,920 bbls of 245,214,991 bbls) of the total number of crude oil (bbl) sold in 2013, i.e. the highest number of crude oil sold; whilst refineries accounted for just 5 % (11,450,075 bbls of 245,214,991 bbls) of crude oil traded, the least.

Figure 8.14.1.2C – Volume of Crude Oil Traded in Bbls in 2013

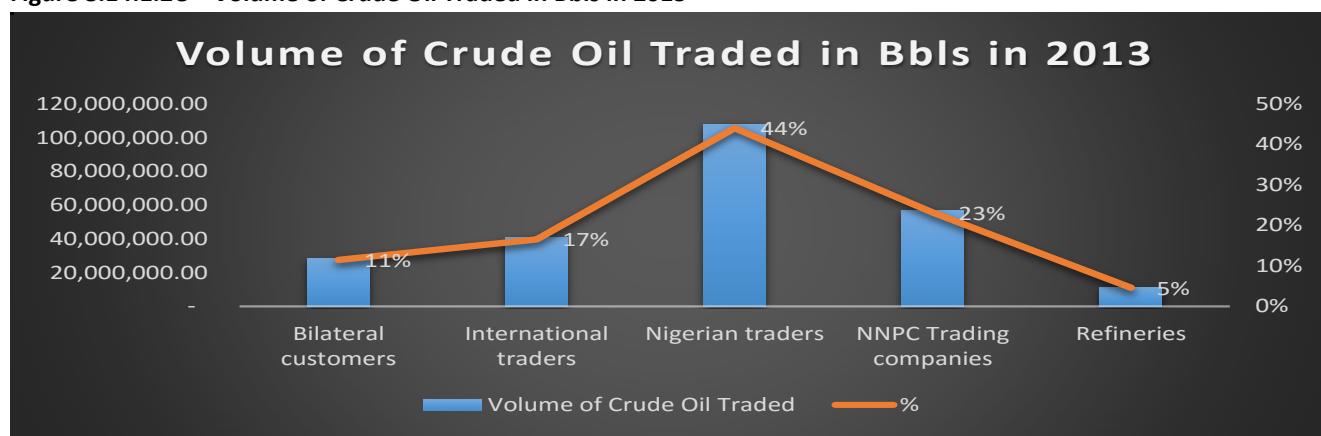
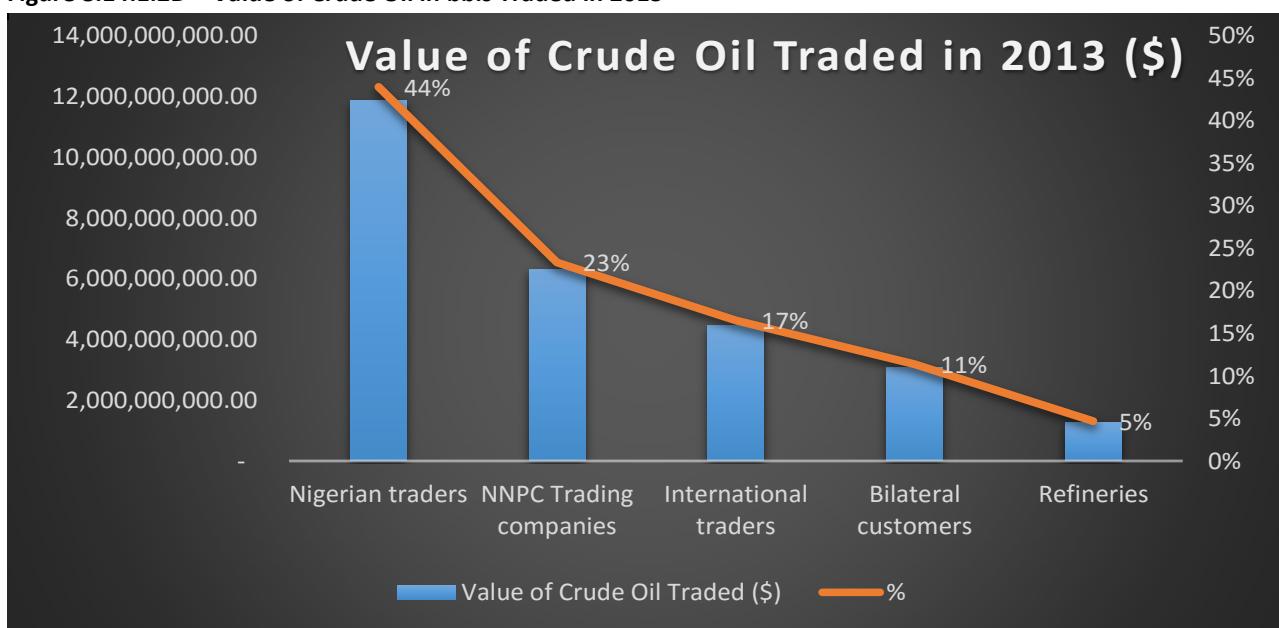


Figure 8.14.1.2D – Value of Crude Oil in bbls Traded in 2013



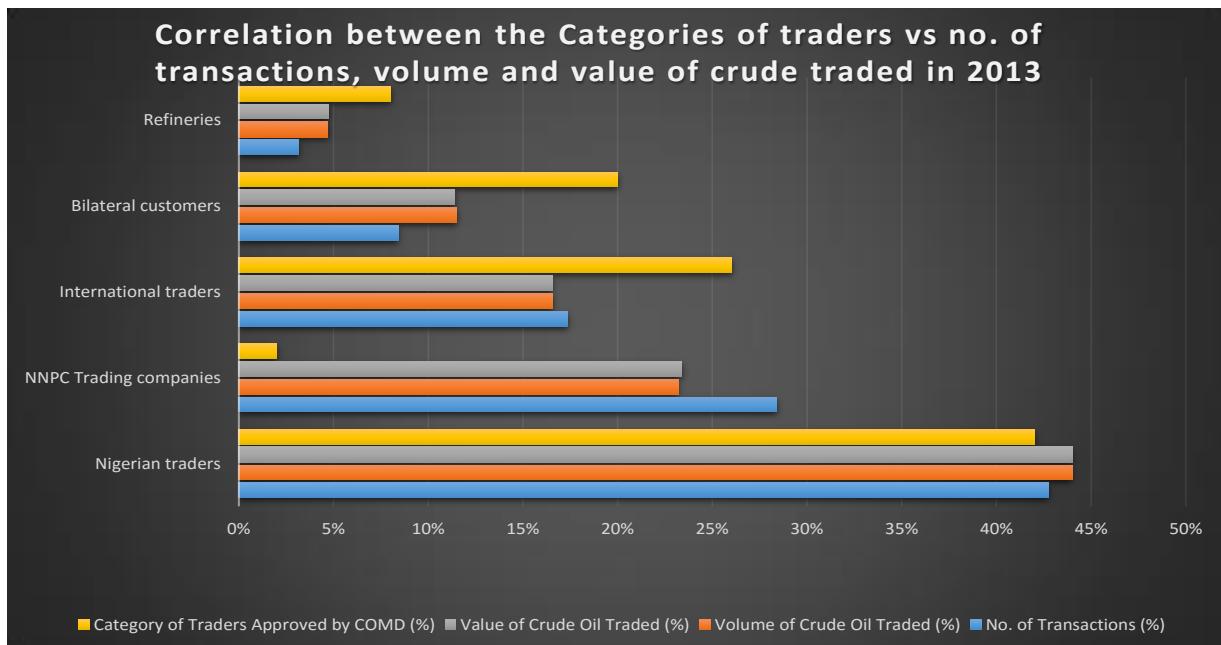
From the graph above, of the \$26, 992,993,809 valued of crude sold, Nigerian traders accounted for 44% (\$11,875,243,704) of the total value of crude oil sold in 2013, i.e. the highest value of crude oil sold. Whilst refineries accounted for just 5% (\$1,271,784,443) of crude value sold, the least.

Table 8.14.1.2B – Summary of 2013 Crude oil Traded

Crude Oil Traders	Categories of Traders Approved by COMD	No. of Transactions	Volume of Crude Oil Traded (bbls)	Value of Crude Oil Traded (\$)
Nigerian traders		21	244	108,084,920
NNPC Trading companies		2	162	56,880,283
International traders		13	99	40,668,355
Bilateral customers		10	48	28,131,358
Refineries		4	18	11,450,075
Grand Total		50	571	245,214,991
				26,992,993,807

Crude Oil Traders	Categories of Traders Approved by COMD (%)	No. of Transactions (%)	Volume of Crude Oil Traded (%)	Value of Crude Oil Traded (%)
Nigerian traders	42%	43%	44%	44%
NNPC Trading companies	4%	28%	23%	23%
International traders	26%	17%	17%	17%
Bilateral customers	20%	8%	11%	11%
Refineries	8%	3%	5%	5%
Grand Total	100%	100%	100%	100%

Figure 8.14.1.2D - Correlation between the Categories of traders vs Number of Transactions, Volume and Value of Crude Traded in 2013



From the graph and table above, in 2013, Nigerian traders accounted for a near perfect correlation between the number of Nigerian traders approved by COMD versus the number of crude oil transactions, volumes of crude traded by the Nigerian traders and the value of crude traded. This analysis is summarised below – the Nigerian traders accounted for:

- **42%** of the total traders;
- **43%** of the total number of crude oil transactions;
- **44%** of the total volume of crude oil (bbl) traded;
- **44%** of the total value of crude oil sold.

Refineries accounted for an inverse correlation between the numbers of Nigerian traders approved by COMD versus the numbers of crude oil transactions, volumes of crude traded by Nigerian traders and the value of crude traded. This analysis is summarised below – Nigeria traders accounted for:

- **8%** of the total traders;
- **3%** of the total number of crude oil transactions;
- **5%** of the total volume of crude oil (bbl) traded ;
- **5%** of the total value of crude oil sold.

Whilst NNPC trading companies accounted for perfect negative correlations between the numbers of Nigerian traders approved COMD versus, the number of crude oil transactions, volume of crude

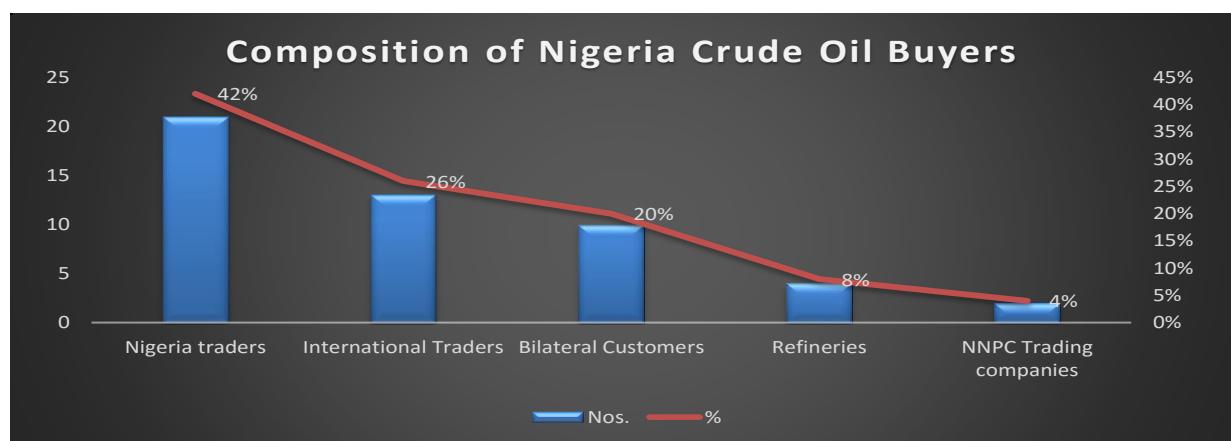
traded by Nigerian traders and the value of crude traded. This analysis is summarised below – NPPC subsidiaries accounted for:

- 4% of the total traders;
- 28% of the total number of crude oil transactions;
- 23% of the total volume of crude oil (bbl) traded;
- 23% of the total value of crude oil sold.

Issues - based on the above analysis, the following issues are identified.

8.14.1.2.1 Composition of NNPC Crude Oil Traders

From the graph below the end user of crude, refineries accounted for just 8% of the total number of approved crude oil buyers in Nigeria.



This clearly shows that there are too many brokers between COMD and the final consumers, i.e. refineries.



These brokers would be making margins that would have gone to the federation's account.

Implication

NNPC's inability to penetrate the end users of crude in its 38 years of existence clearly shows an ineffective marketing and commercial system and possible lack of expertise in the award of crude oil sales contracts. The current marketing system cannot optimize sales realization.

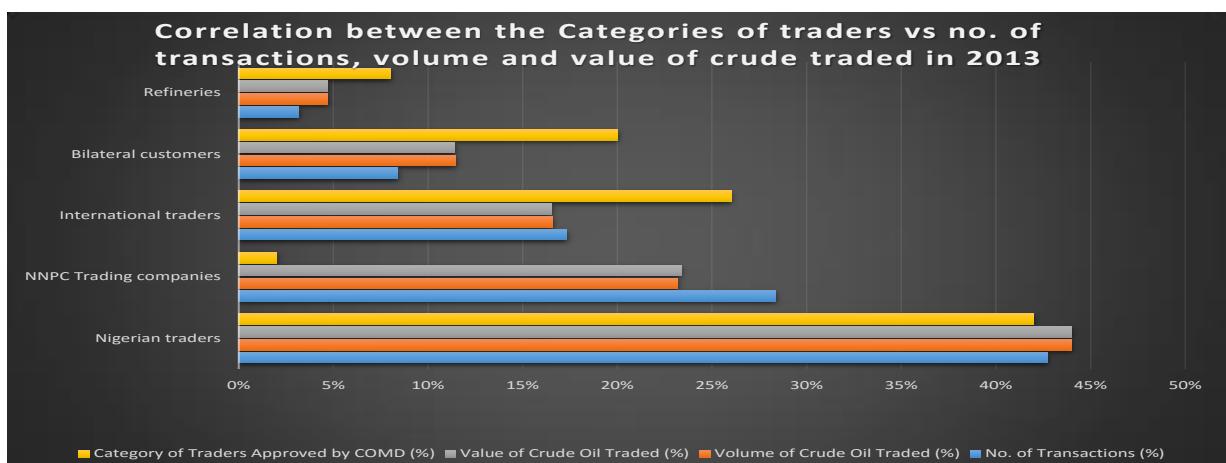
Recommendations

We recommend that in order for the Federation to realize optimal revenue to the federation accounts, NNPC should award a significant portion of its contracts to end users in addition to the review of pricing methodology.

8.14.1.2.2 Self-Review Interest

Crude Oil Traders	Categories of Traders Approved by COMD	No. of Transactions	Volume of Crude Oil Traded (bbls)	Value of Crude Oil Traded (\$)
Nigerian traders	21	244	108,084,920	11,875,243,704
NNPC Trading companies	2	162	56,880,283	6,307,632,833
International traders	13	99	40,668,355	4,462,818,097
Bilateral customers	10	48	28,131,358	3,075,514,730
Refineries	4	18	11,450,075	1,271,784,443
Grand Total	50	571	245,214,991	26,992,993,807

Crude Oil Traders	Categories of Traders Approved by COMD (%)	No. of Transactions (%)	Volume of Crude Oil Traded (%)	Value of Crude Oil Traded (%)
Nigerian traders	42%	43%	44%	44%
NNPC Trading companies	4%	28%	23%	23%
International traders	26%	17%	17%	17%
Bilateral customers	20%	8%	11%	11%
Refineries	8%	3%	5%	5%
Grand Total	100%	100%	100%	100%



From the table and graph above, the NNPC subsidiaries accounted for

- Just **4%** of the total traders; but
- **28%** of the total number of crude oil transactions;
- **23%** of the total volume of crude oil (bbl) traded;
- **23%** of the total value of crude oil sold.

This clearly showed that the NNPC, as the national oil company of the federation, is taking advantage against other crude oil traders, "as a buyer and the same time a seller", by selling crude to itself through its subsidiaries.

Implication

The sale of the federation crude by NNPC and its affiliates is not at arm's length. This is so, because NNPC is acting like the judge, the lead defense and prosecutor in its own case. The federation may be losing revenue from these transactions.

Recommendations

We recommend that in order to create a level playing field, NNPC's role should be clearly segregated from being a buyer and seller at any particular point in time. NNPC cannot be a referee and player at the same time. We also recommend that in order to monitor and track NNPC performance and efficiencies, NNPC and its affiliates should have the same terms and conditions like any other crude oil traders in Nigeria.

8.14.1.2.3 Value Created by Trader Categorisation per bbl; per value (\$); and Transaction of Crude Traded

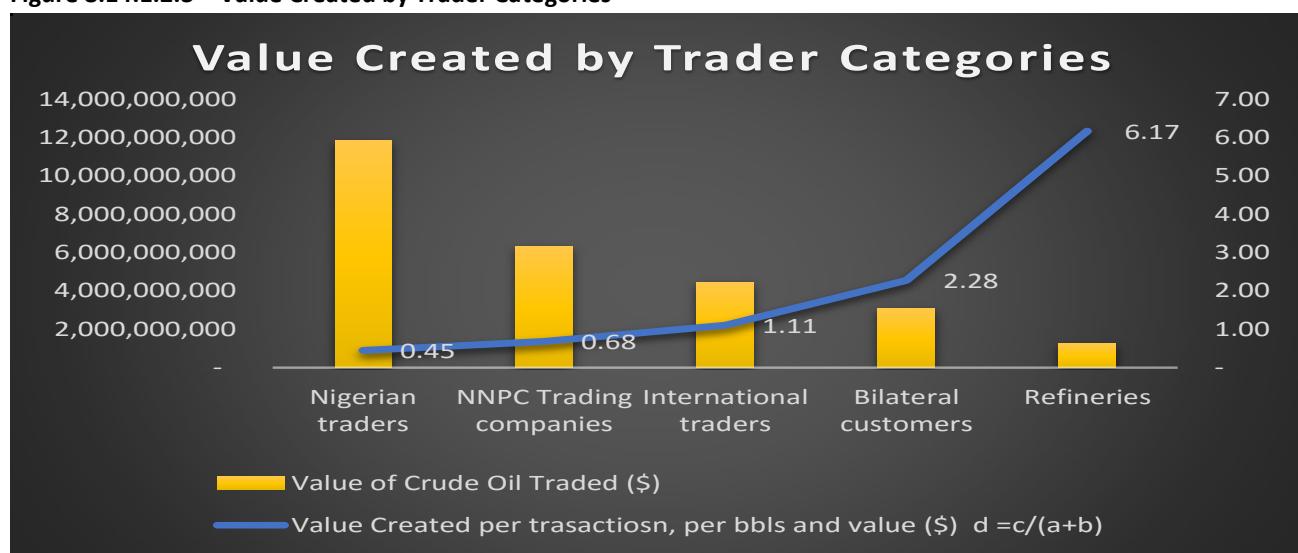
As illustrated in the table below, the Nigerian traders accounted for 44% (\$11,875,243,704) of the total value of crude oil sold in 2013, the highest value of crude oil sold in 2013. This value of crude can be attributable to the volume of crude traded, 108.8mm bbls (44% of the total) and based on the number of transactions, 244 transactions (43% of the total).

Table 8.14.1.2.3 - Traders Categorisation and Transactions of Crude Traded

Crude Oil Traders	No. of Transactions	Volume of Crude Oil Traded (bbls)	Value of Crude Oil Traded (\$)	Value Created per transaction, per bbls and value (\$)
	a	b		d =c/(a*b)
Nigerian traders	244	108,084,920	11,875,243,704	0.45
NNPC Trading companies	162	56,880,283	6,307,632,833	0.68
International traders	99	40,668,355	4,462,818,097	1.11
Bilateral customers	48	28,131,358	3,075,514,730	2.28
Refineries	18	11,450,075	1,271,784,443	6.17
Grand Total	571	245,214,991	26,992,993,807	

However, from the graph below, the value created by each category of traders was calculated by dividing the value of crude oil traded (c) by the volumes (b) and number or frequency (a) of transaction in 2013.

Figure 8.14.1.2.3 – Value Created by Trader Categories



The value created by each category of traders showed that even though refineries accounted for 3% (18 of 571) of the number of crude oil transactions and 5% of the volume of crude oil traded, the refining category accounted for the highest value created \$6.17 per volume (bbl), per value and per transaction. The only empirical analysis of this scenario could be that COMD was dealing with the end user (refineries), thereby eliminating middlemen margins and brokerage fees.

On the other hand, despite the fact that Nigerian traders accounted for 43% (244 of 571) of the total number of crude oil transactions and 44% of the total volumes of crude oil traded, the highest, the Nigerian trader category accounted for the least value created \$0.45 per volume (bbl), per value and per transaction. The only empirical analysis of this scenario could be that the COMD was dealing with some if not most of Nigeria traders who act as middlemen or brokers that routinely resell the cargoes to another intermediaries, for example, the more experienced, larger commodities trading companies with worldwide international reach and marketing network.

NNPC-COMD → Some Nigeria Traders → brokers / or trading companies → Refineries/Ends users

Implication

NNPC inability to penetrate the end users of crude in its 38 years of existence clearly shows an inept marketing and commercial expertise in its awarding of crude oil sales contracts. Based on professional judgment, it was estimated that the federation has lost approximately \$1.2billion by not trading to end users.

Recommendation

We recommend that in order for the Federation to realize optimal revenue to the federation accounts, NNPC should award a significant portion of its contract to end users.

8.14.1.2.4 Crude Oil Sales Claims per Trader and Vessel

Claims within the crude oil sales are made when the quantity measured at the point of discharge is less than the quantity quoted on the BOL. In order to test the validity of these claims, the auditors requested for a list of claims made and payments in 2013. The claim list should include

- The BOL number and quantity;
- The destination of the vessel;
- The name of the vessel and vessel experience factor;
- The quantity measured at the point of discharge;
- The date the claim was made by the buyer.

Implication

There is the risk that the federation will be losing revenues, if quantity discharge at the point of outturn is different from the quantity quoted on the bill of lading.

Recommendations

We recommend that NNPC-COMD should request and keep track of each “vessel experience factor” and where claims are not made as per requirement of International Best practice, such claims should be declared time barred.

8.14.2 Crude Oil Marketing Division (COMD) of the NNPC

COMD trade crude oil from principally three sources of contractual arrangement:

8.14.2.1 Joint Venture

NNPC hold between 55% and 60% equity interest in each JV.

The current structure and participating interest in the existing Joint Venture arrangements is as presented in Table below:

Table 8.14.2.1 - Joint Venture Arrangements and Federation participatory interest

S/NO	JV	OPERATOR	PARTICIPATORY INTEREST							
			NNPC	SPDC	MOBIL	CHEVRON	TOTAL	NAOC	POCNL	PANOC
%	%	%	%	%	%	%	%	%	%	%
1	SPDC JV	SPDC	55	30	-	-	10	5	-	-
2	MOBIL JV	MOBIL	60	-	40	-	-	-	-	-
3	CHEVRON JV	CHEVRON	60	-	-	40	-	-	-	-
4	TEPNG JV	TOTAL E&P	60	-	-	-	40	-	-	-
5	NAOC JV	NAOC	60	-	-	-	-	20	20	-
6	PAN OCEAN JV	PANOCEAN	60	-	-	-	-	-	-	40

Due to cash constraints, resulting in inability of the NNPC to pay its equity participation, various Alternative Funding Arrangements have been entered into, with some Joint Venture Companies. The current forms of Alternative Funding Arrangements are in two broad categories:

- Third Party Financing
- Carry Agreements and Modified Carry Agreements (MCAs).

8.14.2.2 Production Sharing Contracts

Under PSC arrangements, companies bear the risk and cost for exploration, production and maintenance of an oil field.

Cost is recoverable with crude oil in the event of commercial finding, with provisions for

- Royalty Oil – to meet the Royalty liability due to the Government for the period;
- Tax Oil – to cover the Petroleum Profits Tax liability determined for the period;
- Cost Oil – to meet the PSC Operator's CAPEX and OPEX costs;
- Profit Oil – Shared between NNPC and the PSC Operator on an agreed profit sharing ratio.

During the year under review, nine (9) production sharing contract arrangements were engaged in exploration and production activities. The details of these PSC companies are presented below:

Table 8.14.2.2 – PSC Contract Arrangements during the Period Under Review

S/N	Contractors/Operators	Blocks		Major Fields	Contract Year	1st Oil Date
		OPLs	OMLs			
1	Addax Petr. Dev.(Nig) Ltd.	98/118	123/124	Antan/Brass	1973/1998	May-98
2	Addax Petr. Expl.(Nig) Ltd.	90/225	126/137	Okwori	1992/1998	Mar-05
3	Nigerian Agip Exploration	316	125	Abo	1993	Apr-03
4	Shell Nig. Expl. & Co.	212	118	Bonga	1993	Nov-05
5	Esso Expl. & Prod. Co.	209	133	Erha	1993	Mar-06
6	Statoil Nigeria Limited	217	128	Agbami Unit Tract 2	1993	Sep-08
7	Total Upstream Nig. Limited	246	130	Akpo Main/Akpo	1998/2005	Mar-09
8	Sterling Oil Expl. & Energy	280	143	Okwuibome	2006	Apr-11
9	Total Explo. Prod. Ltd.	222	138	Usan	1993	Mar-12

8.14.2.3 Oil Block Owned by NPDC

The Nigerian Petroleum Development Company (NPDC) Ltd is a fully owned subsidiary of the Nigerian National Petroleum Corporation (NNPC). The company has carried out exploration and production operations since 1998. The company has stake in both onshore and offshore. This equity stake ranges from 55%, 60% to 100% ownership of different assets.

In the period under review, a total of 27.7 mm bbls valued at \$3.1bb was traded by COMD on behalf of NPDC. **See Appendix 8.14.1.2**

8.14.2.4 Crude Oil Allocated to PPMC

The PPMC is allocated 445,000 bbl/day to meet refinery needs. However, the refineries cannot utilise all the 450,000 bbls/day. The excess crude allocated to PPMC is traded by the COMD.

In the period under review, a total of 36.3mm bbls valued at \$4.0bb was traded by COMD. **See Appendix 8.14.1.2.**

8.14.2.5 Key issues - based on the various arrangements identified above

The key issues below could influence the production, sales volume and ultimately the revenue accruing to the federation.

1. Joint Venture

Under the existing JV arrangement, crude oil is allocated to the NNPC, based on the 55% or 60% equity interest in each JV. These allocations are traded by the COMD.

Under the JV, the NNPC has entered into special funding arrangements to finance its own share of funding. The current forms of alternative funding arrangements are in two broad categories:

- Third Party Financing –
 - ✓ Satellite Field Development Projects
 - ✓ Reserve Development Projects
- Carry Agreements and Modified Carry Agreements (MCAs).

An audit request was made to review and validate the production numbers coming through the allocation model, as well as the financial arrangement underpinning the financial and commercial fairness of these transactions. This validation is key, because the revenue generated by the Federation through the NNPC is driven by the quantity of crude allocated to NNPC. This request has not been honoured.

Implication

The allocation of crude to the federation could be under-reported, resulting in loss of revenue to the federation.

Recommendation

We recommend that the commercial fairness and special review be conducted to validate federation share of the production numbers coming through the allocation model, as well as the financial arrangement underpinning the financial and commercial fairness of these transactions.

NNPC Response

NNPC entitlement computation models are available for review and evaluation to any interested party should the need arise. The templates are encrypted and resident on selected workstations in order to maintain security, propriety and integrity of our data.

2. Production Sharing Contracts

Under the existing arrangement, crude oil is allocated to the NNPC and the allocations are traded by the COMD.

These allocations could come in the form of

- Royalty Oil – to meet the royalty liability due to the government for the period;
- Tax Oil – to cover the petroleum profits tax liability determined for the period;
- Profit Oil – Shared between NNPC and the PSC Operator on an agreed profit-sharing ratio.

The auditors issued a request to review and validate the production numbers coming through the allocation model Vis a Vis the applications of the production sharing contracts. This validation is key, because the revenue generated by the Federation through NNPC is driven by the quantity of crude allocated to NNPC. This request has not been honoured.

Implication

The allocation of crude to the federation from royalty, tax and profit oil could be under-reported, resulting to a loss of revenue to the federation.

Recommendation

We recommend that a special review be conducted to validate federation share of the production numbers coming through the allocation model.

NNPC Response

NNPC entitlement computation models are available for review and evaluation to any interested party should the need arise. The templates are encrypted and resident on selected workstations in order to maintain security, propriety and integrity of our data.

3. NPDC Production and Crude Oil Traded

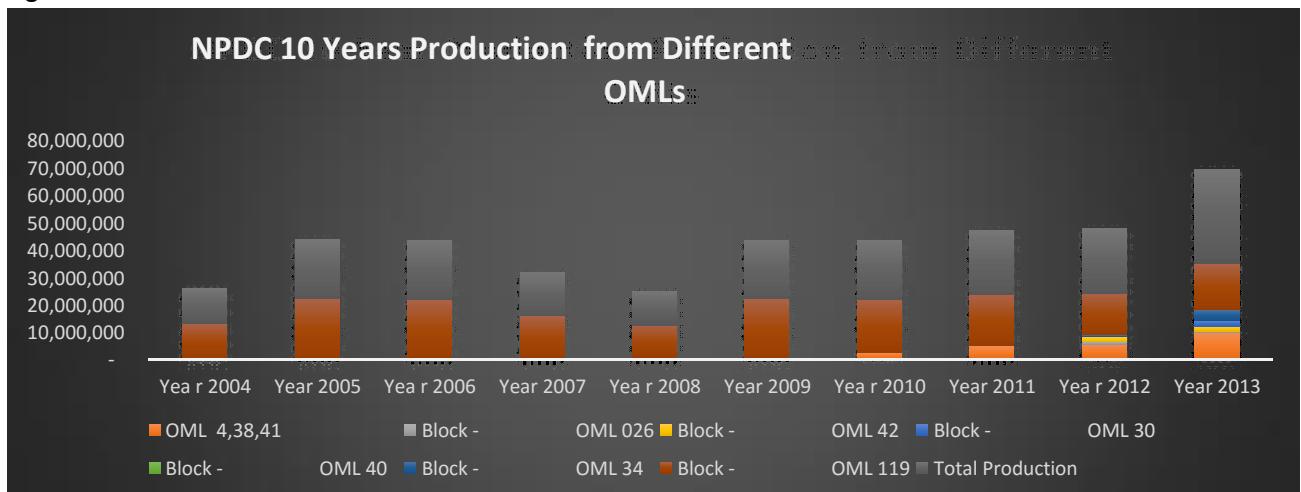
The NNPC has assigned its equity in onshore and offshore blocks to NPDC, between 2010 and 2011. These assets are operated under various JVs, PSCs, and service contracts.

Table 8.14.2.5A - NNPC Equity Blocks Assigned to NPDC between 2010 and 2011

Blocks	JV Partners	NNPC Equity %	
OML 4, 38,41	Septa	55%	
OML 26	First Hydrocarbon Nigeria	55%	These blocks were divested by Shell
OML 30	Shoreline	55%	
OML 34	Niger Delta	55%	
OML 40	Elcrest	55%	
OML 42	Neconde	55%	
OML 119	Service contract with Agip	100%	

For operational and financial reasons, in 2011, the NPDC signed a strategic alliance agreement (SAA) with Atlantic to provide funding and technical support for the development of OML 26, 30, 34 and 42.

Figure 8.14.2.5A – NPDC 10 Year Production from Different OMLs



(Data source; 2013 NNPC Annual Statistical Bulletin)

The auditors made request to review and validate the production numbers coming through the allocation model Vis a Vis the interpretation of the various agreements in place. This validation is key; because of the need to review the revenue generated by NPDC through COMD Vis a Vis the sale of the NPDC production allocation from its different OMLs and ultimately assess the SAAs. This request has not been honoured.

Implication

The allocation of crude to NPDC could be under-reported, resulting to losses of revenue. The commercial fairness of the various agreements could undermine the ability of the federation to generate optimal revenue

Recommendations

We recommend that the commercial fairness and special review be conducted to validate NPDC share of the production numbers coming through the allocation model, as well as the financial arrangement underpinning the financial and commercial fairness of these transactions. The big question however remains the propriety of the sale of the OMLs to NPDC and loss of revenue to the federation. There is also the need to review the sales.

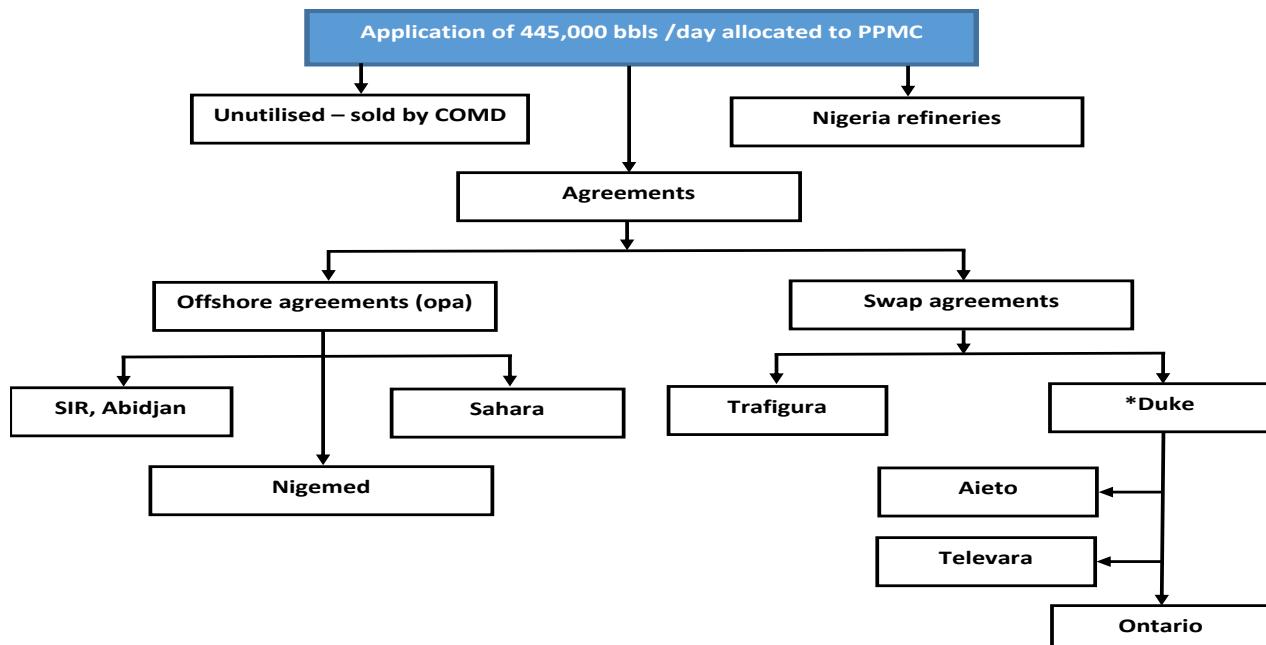
NNPC Response

NNPC entitlement computation models are available for review and evaluation to any interested party should the need arise. The templates are encrypted and resident on selected workstations in order to maintain security, propriety and integrity of our data.

8.14.2.6 Crude Oil Allocation to PPMC

The allocation of 445,000 to the PPMC is through various sources as shown below:

Figure 8.12.2.6 – Crude Oil Allocation to PPMC Flow



*NNPC Subsidiary

An audit request to review and validate the crude allocated to these various agreements via the interpretation of the Offshore Processing Agreements (OPAs) and swaps has not been honoured.

Implication

The allocation of crude to the federation could be under-reported, resulting in a loss of revenue to the federation. The commercial fairness of the various agreements could undermine the ability of the federation to generate optimal revenue.

Recommendation

The various alternative product import arrangements have been analysed to have reported losses from previous audit reports and there is the need to further review the commercial fairness and also validate federation share of the production numbers coming through the allocation model, as well as the financial arrangement underpinning the financial and commercial fairness of these transactions.

NNPC Response

Allocation is based on the contract covering OPA and SWAP arrangements. Further clarification may be obtained from PPMC as operators of the OPA and SWAP arrangements.

8.15 Production Measurement/Metering Infrastructure – Upstream

8.15.1 Chevron Terminal (Escravos)

The audit teams visited the Chevron's crude oil terminal at Escravos, Delta State on Tuesday, 8th September 2015. During the visit, the auditors physically identified the PD meters, prover loop and a visit was paid to the control room and lab.

8.15.1.1 Description of the Terminal

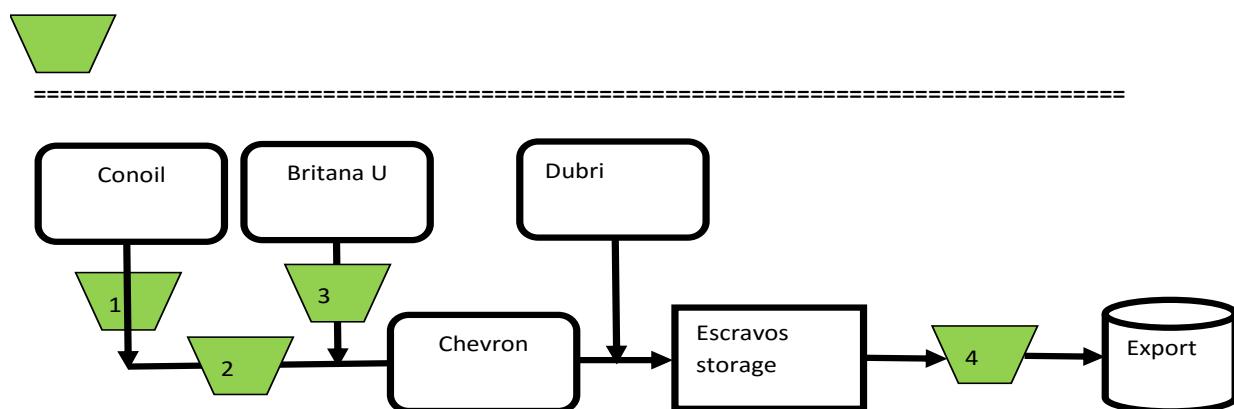
The Escravos crude is loaded from the Chevron-operated Escravos Terminal, which can accommodate Very Large Crude Carrier (VLCC) vessels. The typical cargo size is 950 thousand barrels but alternate cargo sizes can be arranged with advance planning. Chevron has a 40% interest in the concession.



8.15.1.2 Process Schematic

Figure 8.15.1.2 – Escravos Terminal Schematic

Key – metering system



From the schematic above, Crude oil from the Escravos is comingled with a few marginal fields. The Conoil field is metered (1) before it is comingled with the Escravos crude oil. At midmonth, the representative of Conoil and Chevron would normally record the measurement from meter 1 above. This record of the measurement is signed off by the representative of Conoil and Chevron, via a ticket.

At the Chevron site, another meter (2) is used to measure the flow of crude oil from the Conoil field. The readings of meter 2 are used to reconcile the reading from Conoil meter (1).

Crude oil from the Britana U is measured by meter (3), before it is comingled with the Chevron crude. Dubri oil is supplied by barges into tanks and a manual tank tape is used to measure the quantity of crude supplied by Dubri.

All oil received at the Escravos terminal are processed, dehydrated and sample taken for quality tests before storage and export. There are 9 storage tanks in use and 2 of which have been scheduled for upgrade at the Escravos terminal.

During export, there are four Positive Displacement meters that are used for export of crude oil. SGS, a leading inspection, verification and testing and Certification Company independently calibrate these meters. These meters have a prover loop used for health-checking the accuracy of the PD meter. The prover loop is also annually calibrated by SGS, an independent body.

8.15.1.3 Escravos Visit Audit Findings

8.15.1.3.1 Maintenance Record of Metering System

At the Escravos terminal, there is a maintenance system called Computerized Maintenance Management System (CMMS). The system is used to plan for work orders used for routine maintenance. However, planned maintenance and calibration of the Escravos metering system are not captured using the CMMS. All maintenance of the metering system are captured and maintained manually in a folder.

Implication

Sub-optimal utilization of the CMMS.

Recommendation

Audit recommends that CMMS should be used to capture all the maintenance and calibration schedules.

Chevron Response

"CMMS captures in – house maintenance activities. It does not cover contractors activities. Meter maintenance was done only in 2015 and was done by a third party contractor, this cannot be captured in CMMS as the job is not a work order job. Calibration is also done by Third party contractors and the activity is an annual one....."

8.15.1.3.2 Crude Oil Measurement Taken for Conoil Production

At midmonth, representative of Conoil and Chevron takes oil measurement at the Esan, with no NNPC or DPR official in attendance. Conoil crude is comingled with the Escravos oil, in which NNPC has a 60% stake.

Implication

With a majority stake of 60%, NNPC should be represented at the site to sign off the measurement, this is particularly important because Conoil oil is a third party oil that comes with NNPC and Chevron crude.

Recommendation

We recommend that NNPC and DPR officials should be present when the midmonth measurement is taken.

8.15.1.3.3 Meters at Conoil

It has been reported that the meter used at midmonth to measure the crude oil produced by Conoil before comingling with NNPC/Chevron oil has not been maintained or calibrated.

Implication

If the meters are not calibrated or maintained, there is the risk of under- or over-reporting crude allocation to Conoil or NNPC/Chevron

Recommendation

We recommend that the meter used for midmonth measurement is regularly maintained and calibrated.

8.15.1.3.4 DPR Measurement Guidelines

The DPR measurement guideline that defines the measurement practice in Nigeria titled “Procedure Guide for the Determination of Quantity and Quality of Crude Oil and Petroleum Product at Custody Transfer Point” has not been reviewed in a long time. The last version sighted at the terminal was the 1999 version.

Implication

There could be a risk of inconsistent or outdated practice if the procedures are not updated to meet current practices.

Recommendation

We recommend that the procedure be updated to meet international and current best practices.

8.15.2 Atlas Cove, Lagos

The audit team visited Atlas Cove facility on Wednesday, 9 September 2015.

8.15.2.1 Description of the Terminal

Products moved or imported into Lagos through the coastal vessels are discharged primarily at the Atlas Cove Terminal where they are received into storage tanks for onward pumping to Mosimi depot near Sagamu in Ogun State, from where the products are pumped to other depots in that axis, such as Ibadan, Ilorin and Ore.

View of Atlas Cove facility

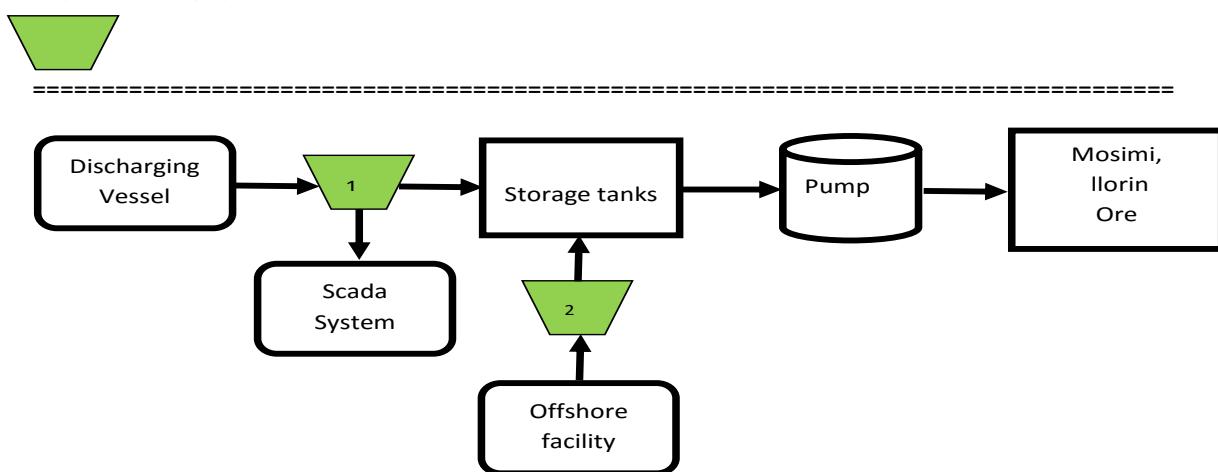


8.15.2.2 Process Schematics

The new Atlas Cove was built in 2012 and commissioned in 2014.

Figure 8.15.2.2 – Atlas Cove Terminal Schematics

Key – metering system



The simplified process schematic above at the new Atlas Cove terminal shows that the products are received from coastal vessels. The products could be PMS or AGO. There are four 24" pipeline unloading arms, used during products discharge. These unloading arms have valve manifold each, for switching the use of a particular unloading arm for storage. The pipelines attached to the unloading arms are installed with meters, as shown by 1 above. These meters are four Pressure Indicator Transmitters and four Prosonic Probes installed on each of the four pipelines.

The pressure indicator transmitter measures the flow rate and volumes of product during discharge whiles the Prosonic Probes transmits the measurement details to a computer systems at the control room called, Scada. The Scada systems, during product discharge monitor and track products pressure, flow rate, total volumes.

The new Atlas Cove was built by Julius Berger Plc, and the maintenance of these metering systems is under the care of the same company.

Atlas Cove also received product from offshore facility. The product received from offshore facility is measured by Ultrasonic meters, also maintained by Julius Berger Nigeria.

There are 7 storage tanks at the Atlas Cove. The summary of these tanks are detailed below:

Table 8.15.2.2 – Atlas Cove Storage Tanks

Number of Tanks	Usage / Notes	Capacity
Three	Use for PMS storage	25,000, 23,000 and 21,000 MT
Two	Use for AGO storage	12,600 MT each
Two	Use for PMS storage. Out of use. These tanks have been under rehabilitation since 2013	11,000 and 21,000 MT

8.15.2.3 Atlas Cove Visit Audit Findings

8.15.2.3.1 Maintenance of Transmitters

The four Pressure and Temperature Indicators that measure the pressure, flow rate and total volumes were last calibrated in 2012 when they were installed . These meters have no maintenance or frequency regime for their change out. The Julius Berger maintenance personnel informed that the meters are changed out only when issues are identified with the meters.

It is was also observed that there was only 1 spare Pressure Indicator Transmitter in store, when physical check was conducted at the store.

Implication

If there is no maintenance regime for the pressure and temperature transmitter there is the risk of inaccurate measurement from the transmitters. There is also the risk of disruptive services if there are no spares in hand to replace faulty transmitters.

Recommendation

A regular maintenance and defined calibration regime is recommended. It is also recommended that spares of the transmitter be kept in store.

8.15.2.3.2 Maintenance of the Prosonic Probes

The four Prosonic Probes that transmit the pressure, flow rate and total volume to the Scada computers systems were last calibrated in 2012 when they were installed . These meters have no maintenance or frequency regime for their change out. We were told by the Julius Berger maintenance personnel that the meters are changed out when issues are identified.

We also noted that there were no spares of Prosonic Probes in store, when the auditor physically visited the stores.

Implication

If there is no maintenance regime for the pressure and temperature transmitters there is the risk of inaccurate measurement from the transmitters. There is also the risk of disruptive services if there are no spares in hand to replace faulty transmitters.

Recommendations

We recommend a regular maintenance and calibration regime . We also recommend that spares of transmitter be kept in store.

8.15.2.3.3 Maintenance and Calibration of Ultrasonic Meters

Products received from offshore facility into the Atlas Cove are metered using Ultrasonic-metering systems. These meters were last calibrated when they were installed in 2004.

Implication

There is a high risk that the Ultrasonic metering measurements will be inaccurate if the meters are not well maintained and calibrated at a regular frequency.

Recommendation

We recommend that a planned maintenance regime should be in place. The Ultrasonic meters should be regularly maintained and calibrated.

8.15.2.3.4 Manual Measurements Tapes (UTI) and Automatic Tank Gauge

When products are discharged at the Atlas Cove storage tanks, the personnel of Atlas Cove had to rely on the measurement tape of the discharging vessels to meter or measure the volumes of oil discharged – there is no independent authentication of the measurement accuracy of the discharging vessel tape.

Personnel at Atlas Cove use Manuel tape measurement devices to record the volume discharged as there are no automatic tank gauge installed in each storage tank. The measurement tapes cannot measure the products temperature when measurement is taking place. Samples are taken for lab analysis and temperature measurement.

Implication

There is the risk of under-reporting the volume of product discharge if temperature measurements are not taken real-time or if there is no automatic gauging system.

Recommendation

We recommend that an electronic measurement tape with automatic device for temperature measurement and automatic tank gauge be purchased for Atlas Cove use. These measurement devices could also be used to benchmark the accuracy of measurement of the discharging vessel.

8.15.2.3.5 Storage Tanks Maintenance and Cleaning

There were no record at the Atlas Cove to show the maintenance, cleaning and inspection regimes of all the storage tanks

Implication

Without a planned maintenance regime in place, storage tanks could be damaged and unsuitable for use due to corrosion and sludge built over time.

Recommendation

We recommend that a planned cleaning and inspection regime be put in place for all storage tanks

8.15.2.3.6 Storage Tanks

Two of the storage tanks used for storing PMC with storage capacity of 11,000 and 21,000 MT have been under rehabilitation since 2013, and currently out of use.

Implication

If storage tanks are not in use, there is the risk of underutilization of storage capacity and payments of demurrage for ships at high sea, should there be lack of storage space.

Recommendation

In order to increase the capacity for storage and avoid payments of demurrage, we recommend the immediate completion of the rehabilitation of the two storage tanks.

8.15.2.3.7 Strategic Storage Reserves

Atlas Cove is a major jetty where petroleum products imported into Nigeria is discharged from tankers to the jetty's storage tank. The original design of Atlas cove is to serve as strategic reserves for the nation and also to provide storage facility for petroleum products to be sold to other African countries.

A multi-million dollar contracts awarded to IPCO (Nig.) PLC to build three 50,000MT storage capacity was abandoned at foundation level.

Implication

In an emergency, the Nigeria Federation would not be able to supply local demand from strategic reserves. A nation without a strategic oil reserves would be exposed to higher petroleum prices during product scarcity and consequently, higher demurrage costs if the products have to be imported or conveyed through the ports.

Recommendation

Full investigation should be carried out on this abandoned project with the view of ensuring the completion/revival of this laudable projects.

8.15.2.3.8 Pipeline Vandalisation

Senior management of Atlas Cove has expressed their concerns over pipeline vandalism at the Ejigbo and Arepo areas when products are pumped from the Atlas Cove to Mosimi. In certain instances, Atlas Cove cannot pump product due to pipeline vandalism.

Implication

Millions of dollars and products are lost to theft due to pipeline vandalism.

Recommendation

It is recommended that a comprehensive and sustainable security arrangement system be put in place to curb pipeline vandalism.

8.15.2.3.9 Generators

The generators used for powering and pumping products during discharge to other areas are obsolete and in a poor condition.

Implication

If the generators are not working effectively and efficiently there could be pumping delay of petroleum products.

Recommendation

We recommend that a new generator be purchased for the Atlas Cove. Consideration should be given busing the nation abundance gas to power the Atlas cove.

8.15.2.3.10 Maintenance Log

No metering maintenance log or systems are used at the Atlas Cove to capture and monitor when meters are maintained, inspected or calibrated.

Implication

There is the risk of omitting key meters for future maintenance, if maintenance of key metering systems are not tracked and monitored.

Recommendation

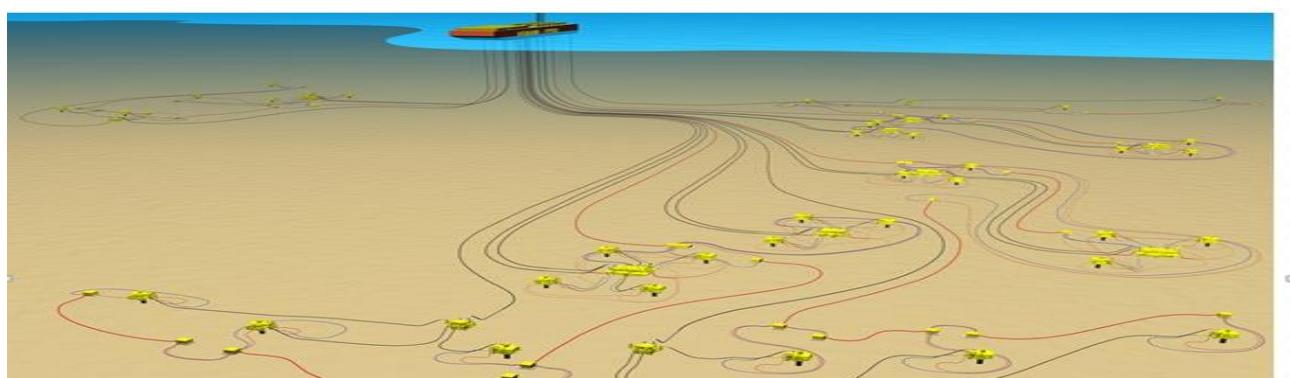
We recommend that all maintenance of meters be recorded and tracked.

8.15.3 Agbami FPSO

An audit team visited Atlas Cove on Thursday, 10 September 2015 for facility inspection and observation of metering activities. An interactive conference call was also made from the FPSO to Lekki with other members of them audit team.

8.15.3.1 Description of Agbami

The Agbami oilfield project is Nigeria's largest deepwater development. The field is operated by CHEVRON. Partners are Farnfa Oil, Petrobras, Statoil and Stardeep (a subsidiary of CHEVRON) and the oilfield is operated as a PSC. It's located in water depth of 1463m with recoverable reserve of 900million barrels of oil.



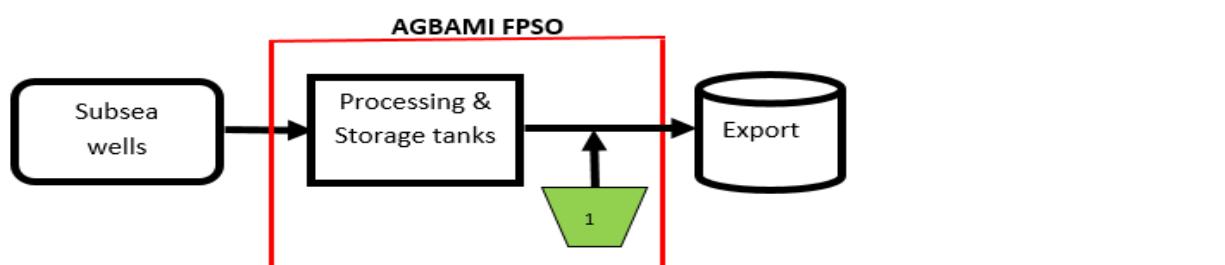
The Agbami field is a subsea well development. The FPSO has 2.3 MMBO storage and accommodation with an offloading Buoy of 1 MMBO parcel. The first oil date was achieved in July 28, 2008. The production rate for oil and gas were 240k Bbl/d and 400k mscf/day. There are 19 production wells, 4 gas injections and 9 water injections. The Agbami oil blocks consists of two unit tracts, Agbami Unit tract 1 (OML 127) is operated by Stardeep water petroleum Ltd while Agbami Unit tract 2 (OML 128) is operated by Statoil Nigeria Ltd.

8.15.3.2 Process Schematics

The platform is designed to handle 250,000 bpd, 450 MMscf/d of gas production and 450,000 barrels of injected water per day.

Figure 8.15.3.2 – Agbami FPSO Schematics

Key – metering system



The simplified process schematic of Agbami FPSO above shows the main metering system (1 above) used for custody transfer during cargo off-take, called the Lease Automatic Custody Transfer Unit (LACT). The LACT units are made up of:

- Four 12" turbine flow meters of which three are in use for every export and one as a spare. During cargo offtake the turbine meters have to be proved for integrity by the prover loop.
- One prover loop used to test the accuracy of the turbine meters. This is a key metering system calibrated annually by an independent metering expert. Once calibrated, the Department of Petroleum Resources (DPR) has to approve the certificate. See **Appendix 8.15.3.2A** for the 2013 calibration certificate.
- Auto sampling system used for automated garbbing of oil sample during cargo offtake for oil analysis such as B&WS
- Temperature and Pressure transmitters
- Four-way diveter valves
- OMNI flow computers – used to monitor the pressure, temperature and flow rate of the turbine meters.

The LACT unit as a whole has to be approved annually by DPR before it can be used as a custody tranfer system during cargo offtake.

Secondary instrumentation called Ullage temprature Interface Indicator (UTI) are also used to measure tanks before and after each cargo offtake. There are 13 UTI on board the FPSO. Of the 13, 2 have been taken offshore for repairs. The remaining 11 have valid calibration certificates.

It is also mandatory that Lab analyst, representative of DPR, NNPC representative, independent inspectors and cargo surveyors have to be present during any cargo offtake. See **Appendix 8.15.3.2B**, export lifting AGB-631, 10 September 2015.

A maintenance management system called JED is used at the Agbami FPSO to track metering maintenance.

8.15.3.3 Agbamin FPSO Visit Audit Finding

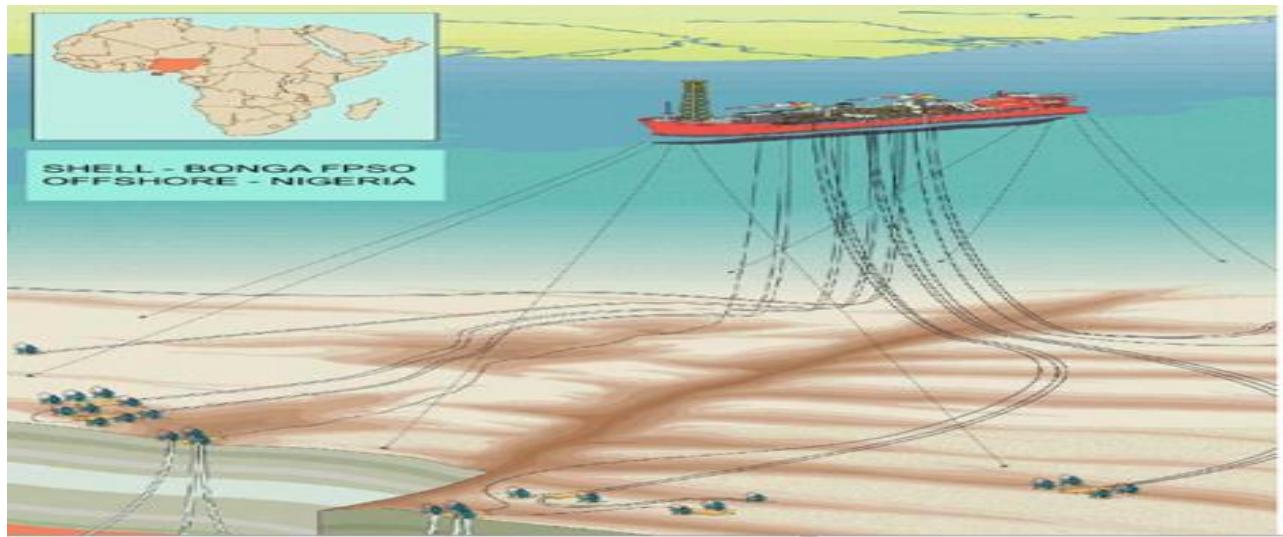
No Issues Were Noted

8.15.4 Bonga FPSO

The audit team visited the Bonga FPSO on Friday, 11 September 2015.

8.15.4.1 Description of Bonga

Bonga is the first deepwater project for the Shell Nigeria Exploration and Production Company (SNEPCO) and for Nigeria. The discovery well is located in oil prospecting license (OPL) 212, which was awarded during Nigeria's first round of deepwater frontier acreage awards in 1993.



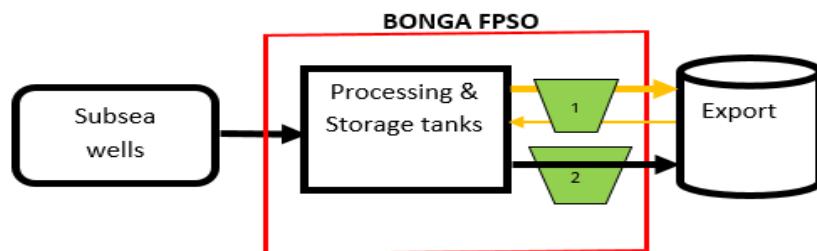
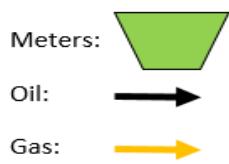
The Bonga field is a subsea well development. As at January 2014, 500 million barrels have been exported from Bonga FPSO. The first oil date was achieved in November 25, 2005. The production rate for oil and gas were 225k Bbl/d and gas export of 170k mscf/day. There are 23 production wells and 19 water injections.

8.15.4.2 Process Schematics

The vessel is designed to handle 225,000 bpd, gas lift of 65 MMscf/g, Gas export of 170 MMcf/d and 300 barrels of injected water a day.

Figure 8.15.4.2 - Bonga FPSO Schematics

Key – metering system



The simplified process schematic above at the Bonga FPSO shows that oil produced is metered and sold, whilst gases produced are metered and exported to LNG Bonny and gas is also bought back

from Bonny to Bonga as fuel gas. The main fiscal oil metering system (2 above) used for custody transfer during cargo off take is called the Lease Automatic Custody Transfer Unit (LACT). The LACT unit is made up of:

- Three 16" turbine flow meters of which two are in use for every export and 1 spare.
- 42" bi-directional prover loop with four way diveter valves, used to test the accuracy of the turbine meters. This is a key metering systems and is calibrated annually by an independent metering expert. Once calibrated, the Department of Petroleum Resources (DPR) has to approve the certificate. See **Appendix 8.15.4.2** for 2015 calibration certificate.
- Auto sampling system used for automated grabbing of oil sample during cargo offtake for oil analysis such as B&WS
- Three steam flow computers and one prover flow computer – used to monitor the pressure, temperature and flow rate of the turbine meters.

The Bonga Fiscal Sales of Gas Export system in 2 above, is comprised of two gas export streams and one gas buy-back stream, comprising of:

- An orifice carrier per stream
- One gas sample fast loop and two sample conditioning systems
- Two gas chromatographs and one dew point analyser
- Two flow computers, gas density transducers, pressure transmitters and temperature elements per stream.

On board the Bonga FPSO, the following maintenance regime is in place:

- Three-monthly validation of oil export and sampling instrumentation performed by the in-house metering specialist technicians.
- Annual validation of all the oil export instruments including the prover loop performed by a specialist third party company.
- Three monthly validation of the gas export and sampling instruments performed by the in-house metering specialist technicians and witnessed by representatives of DPR and NLNG
- Annual recertification of the flow transmitters and gas density transducers by a standard calibration body.

Secondary instrumentation called MMC are also used to measure tanks before and after each cargo offtake. There are 6 MMC on board the FPSO with valid calibration certificates.

The LACT unit as a whole has to be approved annually by DPR before it can be used as a custody transfer system during cargo offtake.

During cargo offtake, representatives of DPR, NNPC, independent inspectors and cargo surveys have to be present.

A maintenance management system called Kelton Intstrument Management System (KIMS) is used at the Bonga FPSO to track metering maintenance. Also there are metering log books maintained for each line of streams.

8.15.4.3 Bonga FPSO Visit Audit Findings

8.15.4.3.1 Inspection of Orifice Plate Meters

The Orifice plate meters used to measure the gas buy-back stream could not be inspected due to the inlet and outlet valve passing. The personnel on board stated that there is no risk of gas mismeasurement.

8.15.4.3.2 Summary of DPR Procedure Guidelines

The “DPR Procedure guide for the Determination of the Quantity and Quality of Crude Oil and Petroleum Pruducts at Custody Tranfer Point” specially provides guidance for the maintenance and proving of Positive Displacement Meters and Turbine Meters. The procedure does not provide guidance for the maintenance and calibration of other meters such as Ultrasonis Meters, Carilois Meters, Venturi meters or Gas Chromat, etc. Also, the procedure does not provide guidance and criteria for the measurement of gas.

The guidance should be updated to define the maintenance record to be kept, frequency of calibration and the cratinity level for both gas and oil.

Our visit highlighted different maintenance regimes and how records are kept by different organisations as shown below.

Metering Instrumentations	Escravos Terminals	Atlas Cove	Agbami FPSO	Bonga
Maintenance Log	No	No	No	Yes
Maintenance System	CMMS - Not used to capture maintenance of met	No	Yes - JED	Yes - KIMS
Positive Displacement Meters (PDM)	Yes	NA	NA	NA
Turbine Meters	NA	NA	Annual maintenance	Three monthly validation and annual validation by third party
Prover Loop	Used to prove PDM whenever there is cargo offtake. Prover loop calibrated annually	NA	Annual calibration	Three monthly validation and annual validation by third party
Transmitters	Periodic maintenance	No maintenance regime in plac	Annual maintenance	Annual maintenance
Ultrasonic Meter	NA	No maintenance regime in plac	NA	NA
Carilio Meters	NA	NA	NA	Three monthly validation
Gas Chromatograph	Periodic maintenance	NA	NA	Three monthly validation
Automatic sampler	Maintenance as at when required	NA	Annual maintenance	Three monthly validation and annual validation by third party
Flow computers	Periodic maintenance	No maintenance regime in plac	Annual maintenance	Three monthly validation and annual validation by third party

8.15.5 Nigerian Agip Oil Company (Brass Terminal)

The audit team visited Nigerian Agip Oil Company (NAOC) crude oil terminal in Brass, Bayelsa State on Tuesday, 15th September 2015. During the visits the audit teams physically identified the

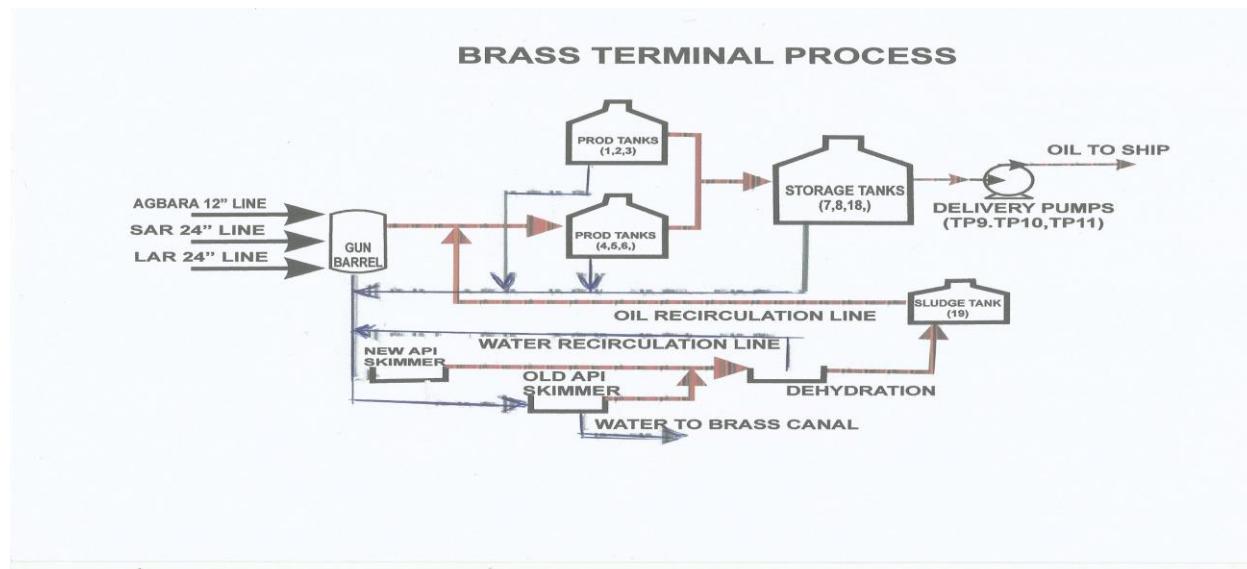
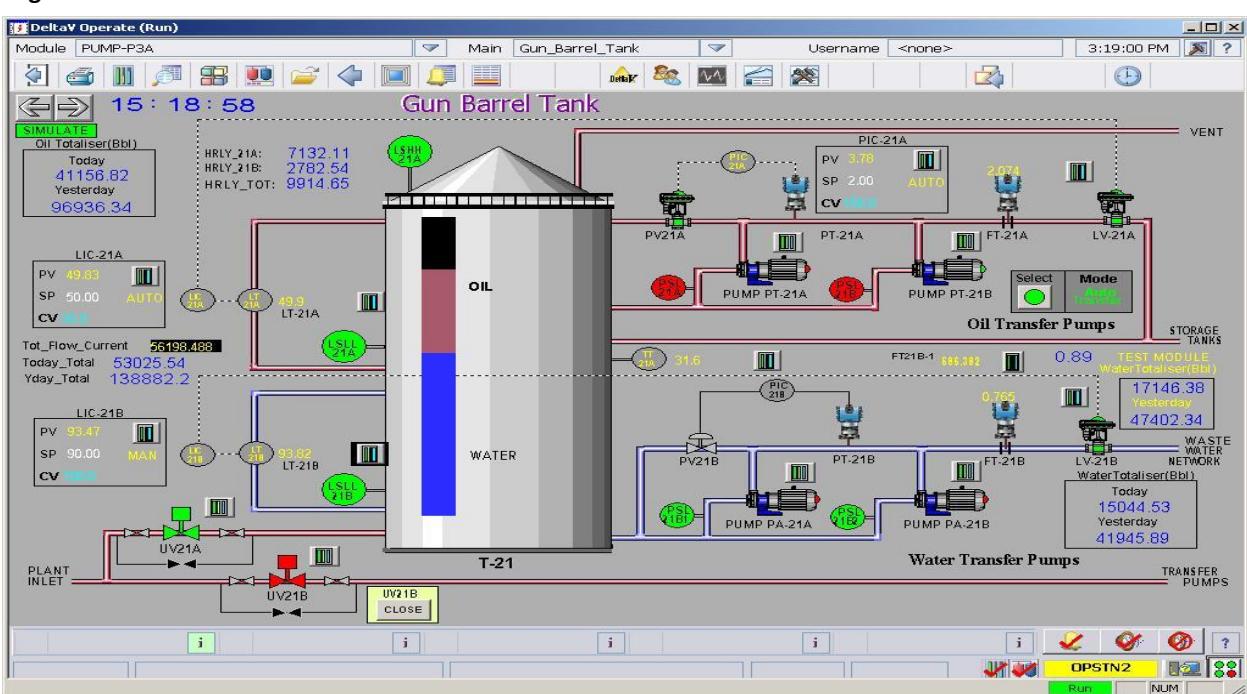
positive displacement meters (PD meters), Master prover and a visit was also made to the control room.

8.15.5.1 Description of the Terminal

Brass crude oil terminal is located in Nigeria. It is loaded from Nigerian Agip Oil Company (NAOC) – operated Brass terminal, which can accommodate Very Large Crude Carrier (VLCC) vessels. The typical cargo size is 950 thousand barrels but alternate cargo sizes can be arranged to do the work. Nigerian Agip Oil Company Limited (NAOC), a joint venture operated by Agip and owned by the NNPC (60%), Agip (20%), and ConocoPhillips (20%) produces 150,000bbl/d (24,000m³/d) mostly from small onshore fields.

8.15.5.2 Process Schematic

Figure 8.15.5.2 – NAOC Brass Terminal Schematic



From the schematic above, crude oil from AGBARA 12' pipeline, SAR 24' pipeline and LAR 24' pipeline enters GUN BARREL (separator) which separates crude oil from water. The crude oil enters production tanks (six (6) are in use) before being transferred to the storage tanks (three (3) are in use). Delivery pumps (three (3) are in use) are used to transfer crude oil from the storage tanks to the ship berthed 32 nautical miles from the terminal. Water from the tanks is re- circulated to the new API skimmer, then to the old API skimmer before being discharged to Brass canal. The sludge is dumped in a tank.

During export, there are three positive displacement meters that are used for export of crude oil. These meters are independently calibrated and have a proven loop for health checking the accuracy of the PD meters.

8.15.5.3 NAOC Brass Terminal Visit Audit Findings

8.15.5.3.1 Maintenance of Metering System

At Brass terminal, the master meter/master prover used as solution to prove the accuracy of turbine meters is bad.

Implication

Non - utilization of the master prover loop.

Recommendation

Audit recommends that a new prover loop should be procured and installed since the old one is not functioning due to ageing.

8.15.5.3.2 Manual Measurement Tape

Audit observed that manual dipping measurement Tape is used to capture the crude oil volume in Brass Terminal Tanks.

Implication

Incorrect capture of the actual crude oil volumes and the actual degree temperatures inside the tanks .

Recommendation

Ullage – Temperature Interface Indicator (UTI) manual measurement instrument is more reliable, the temperature of the tanks for each measurement is also captured, and this is the best practice now.

8.15.5.3.3 Vandalized valves, pipelines and bunkering ships

At Brass Terminal, pipelines carrying crude oil from AGBARA, SAR and LAR to the GUN BARREL tank is prone to vandalism and lots of illegal crude oil thefts go on along the pipeline. Audit team was conducted round to see vandalized valves, blown out pipes and impounded crude oil bunkering ships berth in different locations in the ocean.

Implication

Pipeline vandalism and crude theft have significant impact on oil revenue derived by government.

Recommendation

Government and the immediate communities to give adequate attention to security of terminal infrastructures while also addressing the social factors that lead to these economic crimes against the State.

8.15.6 General Recommendations on Production Measurement/Metering Infrastructure

In addition to the recommendations arising from the facility visits discussed above, other general recommendations from the last audit reports that are yet to be implemented include the following:

- DPR's measurement guideline should be updated, approved and implemented.
- The Weights and Measurement Department of the Federal Ministry of Trade and Investments should be more incisive in its monitoring activities in the oil and gas industry.
- Periodic hydrocarbon mass balance meetings should be held regularly and NEITI should be in attendance. The current practice of reconciling hydrocarbon volumes between covered entities and DPR for 2012 and 2013 in 2014 is not encouraging.
- Establishment of a national frame work on hydrocarbon measurement.
- Define minimum standards of measurement at each stage of the flow from Wellhead to Terminal (that is to stipulate the uncertainty limits of measuring equipment; the "level of proof" that the measurement method is meeting that requirement).
- Define frequency of independent calibration required to provide assurance that the measurements are sufficiently accurate on an on-going basis.
- Define the records to be kept of measurements, meter settings, calibrations and maintenance activities.
- Define the procedure it would require to accept a "new" measurement technology as sufficiently accurate.
- Define the certified records to be lodged with DPR confirming that meter proving/tank calibration had been/certified and confirming the current meter factors and tank calibration charts.
- Develop a pilot Programme (in addition to the existing national data repository-NDR) for an on-line production-reporting tool that would be based on the definitions identified above.

- Terminal operators should install meters at their incoming trunk lines to serve as back up for the meters at the tanks and hand dips.
- There should be an approved standard measurement in the upstream and downstream operations. The acceptable range should be clearly specified in order to minimize inconsistencies in the measurement process.

We strongly recommend the implementation of the suggestions listed above.

8.16 Production Arrangements

Introduction

Nigerian oil and gas industry has been vibrant since the discovery of crude oil in 1956 by Shell Group. The structure of the industry comprises:

- Upstream – exploration and production of crude oil and gas
- Downstream – processing, storage, marketing and transportation of crude oil, gas, gas to liquids and liquefied natural gas (LNG)
- Service

In the Nigerian upstream sector, there are various production arrangement namely:

- Joint Venture (JV)
- Production Sharing Contract
- Marginal Fields/Sole Risk Operations
- Service Contracts
- Modified Carry Agreements (from Joint Venture Arrangements)

8.16.1 Review of Production Arrangements

Production arrangements are contractual framework within which the Nigerian Government and the operators conduct petroleum operations in Nigeria. The industry is categorized in order to identify the fields in which the various companies operate.

The current production arrangements and respective operators for 2013 are listed below:

Table 8.16.1 - 2013 Oil and Gas Producing Companies

Operators for 2013			
Joint Ventures (JV)			
1	Total Exploration and Production Nigeria Limited (TEPNG)	4	Chevron Nigeria Limited (CNL)
2	Nigeria Agip Oil Company Limited (NAOC)	5	Mobil Producing Nigeria Unlimited (MPNU)

Operators for 2013			
3	Shell Petroleum Development Company Limited (SPDC)	6	Pan Ocean Nigeria Limited
Production Sharing Contract (PSC)			
1	Addax Petroleum Development Company Limited	6	Addax Petroleum Exploration Company Limited
2	Esso Exploration and Production Nigeria Limited (EHRA)	7	Sterling Oil Exploration and Energy - SEEPCO (OKWUIBOME)
3	Nigeria Agip Exploration (ABO)	8	Shell Nigeria Exploration and Production Company SNEPCO (BONGA)
4	Total Upstream Nigeria Limited TEPNG (USAN)	9	Phillips Oil Company Nigeria Limited
5	Star Deep Water Petroleum Limited		
SOLE RISK (SR)			
1	Continental Oil and Gas Limited	10	Moni Pulo Petroleum Development
2	Consolidated Oil Producing Limited	11	Atlas Petroleum International Limited
3	Amni International Petroleum Development Company Limited	12	Dubri Oil Company Limited
4	Nigeria Petroleum Development Company Limited (NPDC)	13	Express Petroleum and Gas Company Limited
5	Cavendish Petroleum	14	Neconde Energy Limited
6	Allied Energy Resources Limited	15	Shebah Exploration and Production CO. Limited
7	Seplat Petroleum and Development Co. Ltd	16	Camac International Nig. Limited
8	First Hydrocarbon Nigeria	17	Shoreline Natural Resources Limited.
9	ND Western Ltd (in JV arrangement with NPDC)		
MARGINAL FIELD (MF)			
1	Platform Petroleum Limited	6	Niger Delta Petroleum Resources Limited
2	Midwestern Oil and Gas Company Limited	7	New Cross Petroleum Limited
3	Pillar Petroleum Limited	8	Energia Limited

Operators for 2013			
4	Walter Smith Petroman Oil Limited	9	Brittania-U Nigeria Limited
5	Oriental Energy Resources Limited		
Service Contracts (SC)			
1	Agip Energy and Natural Resources (AENR)		

These operators produced crude oil and / gas from their respective oil mining licenses (OML) or oil producing licenses(OPL) within the audit period except Star Deep and Cavendish Petroleum.

8.16.1.1 Production Arrangement

The production arrangements present in Nigeria are explained below:

1. Joint Ventures

These are arrangements between Nigerian National Petroleum Corporation (NNPC) on behalf of the government and a counterpart International Oil Companies (IOC) whereby the parties hold the oil prospecting licenses (OPL) or oil mining licenses (OML) jointly and funding for the exploration, development and production of petroleum, and the hydrocarbons produced are shared in proportion to the participating interest held by each party. This arrangement is typically governed by a joint operating agreement (JOA) between the NNPC and its IOC joint venture partner that provides for the conduct of petroleum operations. The IOC is typically the operator, with a management committee established to supervise operations. The participatory interest of NNPC is 60 per cent in all JVs, except the Shell (SPDC) operated JV, where it is 55 per cent.

The current JV arrangements are:

Table 8.16.1.1 - Joint Ventures (JVs) Equity Arrangement

Operators	Arrangements	
SPDC JV	NNPC	55%
	SPDC	30%
	TEPNG	10%
	NAOC	5%
CNL JV	NNPC	60%
	CNL	40%
TEPNG JV	NNPC	60%
	TEPNG	40%

Operators	Arrangements	
MPNU	NNPC	60%
	MPNU	40%
NAOC JV	NNPC	60%
	NAOC	20%
	POCN	20%
PAN OCEAN JV	NNPC	60%
	POOC	40%

It is however important to note that the JV model is currently being phased out in the oil and gas industry, due mainly to the inability of the NNPC to fund its share of JV costs. The inability of NNPC to pay its obligations gave birth to alternative form of financing namely: carry arrangement and modified carry arrangement.

2. Modified Carry Arrangement

The Modified Carry Arrangement (MCA) is a modification of existing Carry Arrangements (CA) where in the past, IOCs finance the NNPC's share of agreed project costs as a loan and repayment of this loan was paid with oil.

Under the MCA NNPC's Joint Venture (JV) partners finance their share of agreed project costs and pay compensation and interest on cash basis instead of payment with oil. The party that funds a project on behalf of the other(s) is called the Carrying. The Carrying Party recovers its costs through Tax offset and a share of the equity production of the party being funded.

Before any project is accepted and admitted as an MCA project, there are certain specific requirements that the project is expected to satisfy. If the project fails to satisfy these requirements, it would either remain part of the JV project or recommended for another type of alternative funding.

The specific requirements include the fact that incremental production revenue as well as benefits under the JV would have to be clearly identified, showing what incremental production is going to be realized.

Secondly the "Business Economics" of the project should be calculated taking into cognizance the Internal Rate of Return (IRR) of 8% and also confirming that the project cannot be financed under the JV. In doing so the costs for the projects should be known and shown clearly in the Capital costs and Operating Expenditure (CAPEX and OPEX) as well as any other associated costs.

The Capital Cost that is agreed and approved by all parties are settled as follows:

- a) Tax Relief at 85% is paid through transfer of NNPC's tax benefits to the Carrying Party.
- b) Balance of 15% referred to as Residual Carry Oil is paid from the NNPC's equity portion of the incremental oil and gas production from the relevant projects which are lifted and marketed by NNPC.
- c) Compensation (Interest): In consideration of financing the Carry capital expenditure (CAPEX), the Carrying Party is compensated at an interest rate that would yield a financial internal rate of return (FIRR) of 8%. This payment comes from the NNPC's equity portion of the incremental oil and gas production from the relevant projects which are lifted and marketed by NNPC.
- d) An important feature of MCA is that Carry Capital Cost (CCC) is only recovered in monetary terms (dollars) for both Carry Oil and Share Oil transactions. NNPC sells the crude at a set price and the monetary values of the equivalent barrels are paid into the escrow account. Royalty and Petroleum Profits Tax (PPT) are paid to the Federal Inland Revenue Service (FIRS) and the Department of Petroleum Resources (DPR) respectively.

3. Production sharing contracts (PSCs)

As a result of the increasing funding pressure from the JVs, the Federal Government of Nigeria (FGN) adopted the PSC model in 1993 as the preferred petroleum arrangement with IOCs for onshore and offshore operations. This arrangement was modelled from Indonesia.

Under the PSC arrangement, the OPL and the OML is held by the NNPC, which engages the IOC or indigenous private investor as a contractor to conduct petroleum operations on behalf of itself and the NNPC. The contractor is responsible for financing all costs of the various stages of petroleum operations – i.e. exploration, development and production within a concession area under an OPL for a period not longer than 10 years. When the exploration is successful, the IOC will be entitled to recover its costs, together with reasonable profit when commercial production begins and also pay royalty, PPT and other bonuses to FGN. If the operation is not successful, the contractor will bear all losses.

The government participates through NNPC, which holds the relevant concession/license and then engages third parties under the PSC to conduct petroleum operations. NNPC is entitled to a share of the Profit Petroleum under the PSC.

4. Sole risk/Marginal field contracts

The Federal Government (FG), in furtherance of its Nigerian Content agenda, encourages IOCs to surrender their marginal fields for assignment to indigenous concession holders. To provide special incentives to marginal field operators, the FG promulgated the Petroleum (Amendment) Act No. 23 and the Marginal Field Operations (Fiscal Regime) Regulations 2005 on the development of marginal fields.

Generally, a Marginal Field is defined as any field that has reserves booked and reported annually to DPR and has remained unproduced for a period of over 10 years.

These fields are reallocated to indigenous operators as "Marginal Fields". Marginal Fields are subject to a different Royalty, Petroleum Profits Tax and Investment Tax Credit regimes as follows:

Petroleum Profits Tax (PPT) 50% Flat

Investment Tax Credit 50% Flat

ROYALTY: Is graduated as follows for Deep Offshore -

In areas up to 200 meters of water depth 16.67%

In areas from 201 to 500 meters of water depth 12%

From 501 to 800 meters of water depth 8%

From 801 to 1000 meters of water depth 4%

Areas in excess of 1000 meters of water depth 0%

Royalty rate for Inland Basins is a flat rate of 10%

The main objectives of the government for introducing Marginal Field regime include:

- I. Expand the scope of participation by small (indigenous) players in Nigeria's oil industry.
- II. Increase the country's oil and gas reserves base.
- III. Provide opportunity for portfolio rationalization.
- IV. Enhance employment opportunity.

See appendix 8.16.1.1 for current marginal field status.

5. Service contracts

Under the service contract arrangement, the OPL is held by the NNPC, while the service company funds petroleum operations. Each Service Contract relates to a single concession. The primary term is usually five years or for a shorter period, renewable at NNPC's option for a further two years.

In the event there is no oil discovered in commercial quantities, the contractor does not recover its costs and there is no obligations on either party. When oil is found, the contractor is reimbursed cost incurred only from proceeds of oil sold and is paid back in instalments, according to the formulae stipulated in the contract.

The contractor is liable to pay Companies Income Tax (at 30 per cent) and not PPT. As an incentive for the risk taken, the contractor has the first option to purchase certain fixed quantities of crude oil produced from the service contract area at market prices.

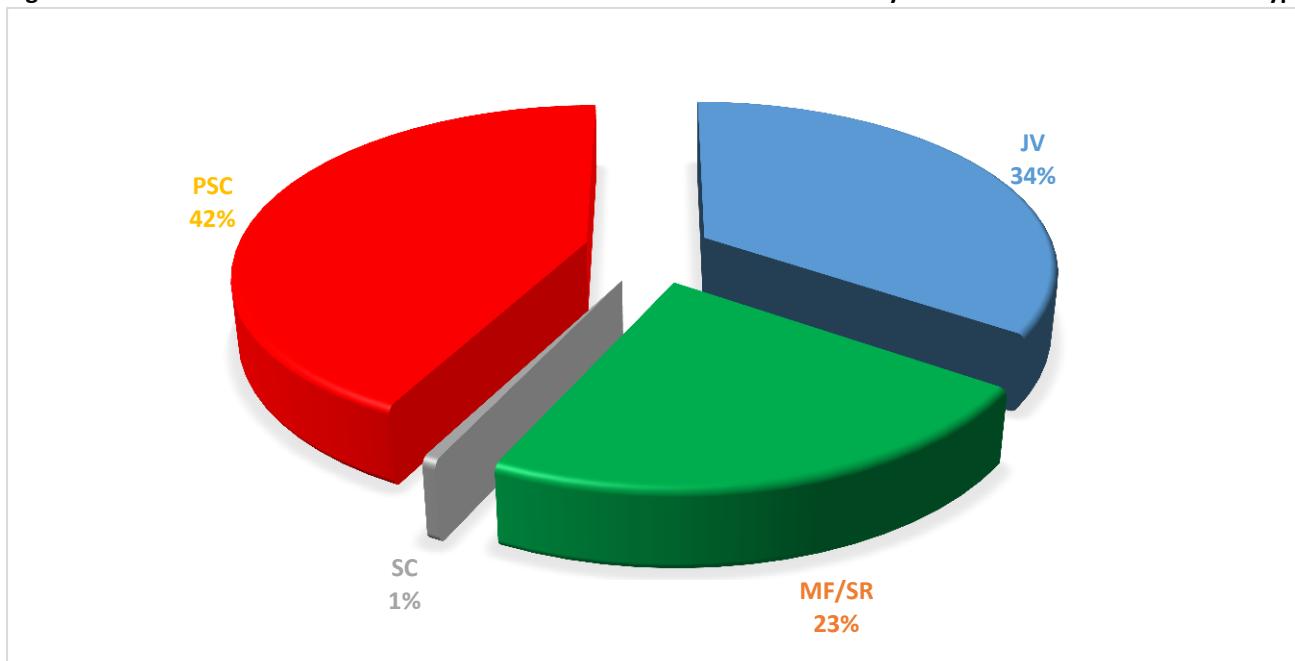
Note: the concession ownership remains entirely with NNPC and the contractor has no title to the oil produced.

See Appendix 2.9 for the various arrangements and license area that impact the various arrangements.

8.16.2 Production Arrangement Status versus Concession in 2013

The current status of the production arrangement as against concession can be depicted in the chart below:

Figure 8.16.2A - Distribution of concessions by lease contract type



Production Arrangements

Production is defined as the “sum of barrels of crude oil extracted each day from drilling operations compounded with the equivalent production of natural gas liquid and refinery gains from domestic or imported petroleum production”.

Section 63 of the Nigeria Petroleum Regulations 1969 as amended defines “casing –head petroleum spirit or crude oil production as any liquid hydrocarbon which:

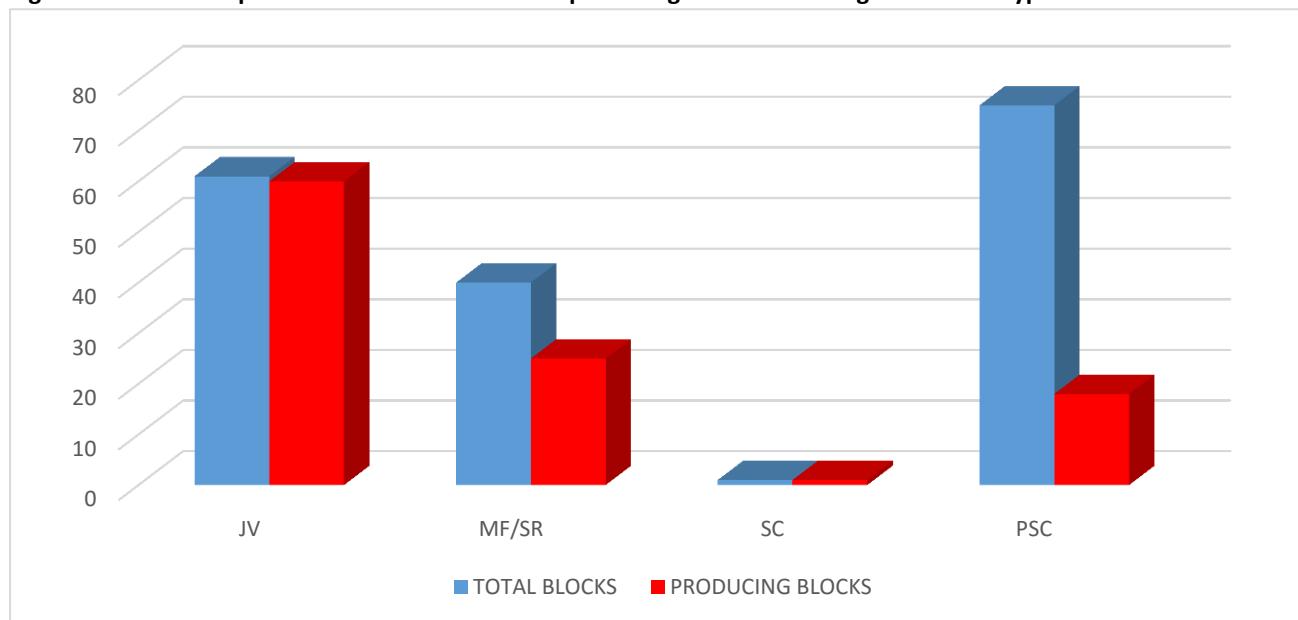
- a. Have been obtained from natural separation or by any chemical or physical process, and
- b. Have not been refined or otherwise treated.

DPR considers crude production as that which is produced from the well and received at the flow station (inclusive of oil, gas, water, and sediments-sand) and it is measured in barrels.

Producing concessions

The comparison of producing oil blocks to that of allocated blocks with respect to the arrangements is shown below:

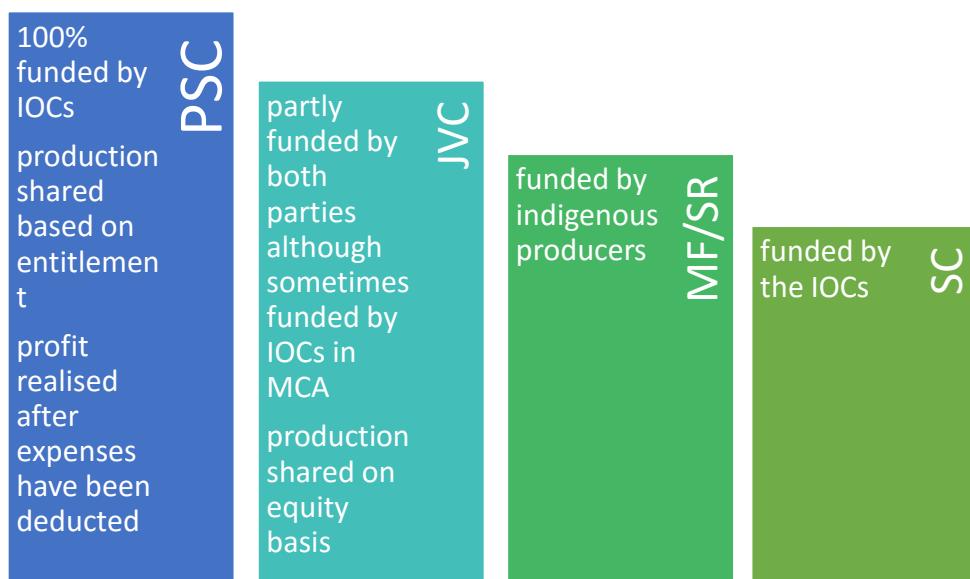
Figure 8.16.2B - Comparison of allocated blocks to producing blocks according to contract type



8.17 Funding Arrangements

The funding for the various agreements depends on the production arrangements as depicted below:

Figure 8.17 - Funding Arrangements



8.17.1 Key Findings on Production Arrangements

1. Divestment of assets

Under the Petroleum Act (section 14, 35 (2c)), a holder of a licence or a lease granted under the Petroleum Act is prohibited from transferring such licence or lease or any right, power or interest in the same without the consent of the Minister and the payment of the prescribed fee or premium.

The consent of the Minister is granted when he is satisfied that:

- (i) The proposed assignee is of good reputation or a member of companies of good reputation or is owned by a company or companies of good reputation;
- (ii) There will be available to the proposed assignee sufficient technical knowledge, experience and sufficient financial resources to effectively carry out a programme satisfactory to the Minister in respect of the operations under the lease; and
- (iii) The proposed assignee is in all other respects acceptable to the government. Such transfer will attract the payment of stamp duty, which is assessable on the basis of the amount of consideration involved. The duty is payable directly to the Federal Inland Revenue Service. There is no capital gains tax payable on the transfer of an interest. The Petroleum Act does not require the consent of the Minister if there is a change of control of a holder of an interest in licence or a lease. However, an applicable PSC or JV agreement may set out requirements for consents.

Implication

Due process was not seen to be adhered to

Recommendation

The process of divestment should follow due process (and the bidding process should be encouraged). This would enable companies with integrity to purchase the assets

2. Reforms

Issue

Slow passage of the PIB

Implication

It further delays the proposed reforms in the Oil and Gas Industry

Recommendation

We encourage the new Government to ensure the Petroleum Industry Bill (PIB) is passed. This would enable due monitoring process of the oil and gas industry

9 CONCLUSION AND RECOMMENDATIONS

The audit has been able to reconcile all revenue payments from the Covered Entities in the Oil and Gas sector to the revenue received by the Government agencies within the materiality threshold approved by NEITI-NSWG and unresolved differences noted during the course of the audit have been investigated and highlighted in the report.

From the comprehensive review of all transactions within the scope of the audit and the findings thereto, details of which are presented in this report, it is pertinent to conclude that there is the need for the stakeholders in the Oil and Gas Sector to promote integrated reporting for greater transparency and accountability. The efforts by NEITI to introduce the NEITI Audit Data Base Management System (NADBMS) is therefore commendable.

A major recommendation from this audit is the need for the Federal Government to carry out total reform in the Oil and Gas sector which in our opinion can be achieved through the passage of the Petroleum Industry Bill (PIB). The passage of the PIB along with the introduction of an integrated reporting system will address most of the audit issues noted in this report and ensure greater transparency in the Oil and Gas Sector.

10 STATUS OF REMEDIATION ISSUES FROM PREVIOUS AUDITS

10.1 Concluded issues include:

10.1.1 Education Tax

FIRS assessed the amount of **\$540,989,604.37** as against the audits findings of **\$667.8 million**. The sum of **\$355,293,274.07** has been collected and the sum of **\$184,572,673** was set off by the companies against PPT as Section 10 deductions.

10.1.2 Accounting for In-Kind transactions - PSC

Previous NEITI audit reports noted unresolved accounting issues for In-kind transactions. However, the current audit revealed that FIRS and DPR have addressed the issue by opening separate accounts in 2007 for Tax and Royalty proceeds.

Update: Monthly reconciliation meetings are being held to ensure smooth implementation of the resolutions.

10.1.3 Signature bonus

DPR is responsible for collecting signature bonus. NNPC however, does not inform DPR of the date of signing of each PSC to ensure that all committed signature bonuses are collected. This created difficulties in obtaining reliable and comprehensive information on the arrears of signature bonus.

Update: DPR has established adequate accounting system to manage all signature bonus commitments entered into by companies.

10.1.4 Petroleum Profit TAX (PPT) for Chevron and Mobil

The sum of **\$62,960,401** has been paid by the two companies while the variance is being contested.

10.1.5 Sales of Government Crude (Domestic)

NNPC is expected to pay the Federation for domestic crude oil allocation not later than 90 days from the bill of lading date. However, NNPC has not been complying to due dates of payments: the Federation may have lost the time value of money for the amounts not remitted on due dates.

Update: A monitoring framework has been jointly developed by OAGF/RMAFC/NNPC to ensure that payments are made by NNPC as at when due.

10.1.6 Bid Rounds

Some oil blocks are subjects of court litigation in relation to DPR's right to offer the blocks e.g. (OML 13, 16). This has created delays in the allocation of the blocks with attendant setbacks in production and income loss to the Federation.

Update: Settlement was reached, OML 13 & 16 are now back to the government and ministerial approval was gotten to conclude the award process for OPLs 2001 – 2003 (former OML 13) and OPL 2004 (former OML 16).

10.1.7 NNPC subsidy claims

The 2012 audit recommended the need for further reconciliation of NNPC subsidy claims. NNPC confirmed that the total subsidy approved and certified by the PPPRA for the period of January to December 2012 amounted to **N893.746 billion**.

Update: This issue has been concluded and fully reconciled.

10.1.8 Subsidy Data, Payments and PPPRA Audited Financial Statements (AFS)

The Reconciliation issues relating to PPPRA over recovery remittances, PPPRA and OAGF processing time differences and the PPPRA Annual Financial Statements.

Update: The issue has been resolved and updated schedule sent in. PPPRA has reconciled the difference with a view to ensuring accuracy of the payment records.

10.1.9 Management of Crude sales during Trial Marketing Period

Crude oil from new producing fields is subject to trial marketing. Cargoes are lifted by both NNPC and the operator. After the trial marketing, NNPC and the operator meet to agree on the pricing formula for the crude. Consequently, different practices exist between the PSC's on how the proceeds of the sales during the TMP are managed. This implies that methods for calculating funds allocation are not standardized.

Update: A guideline is in place and the auditors had access to this during the audit exercise.

10.1.10 Exchange Rates used for conversion of US\$ into Naira for Domestic Crude Allocations.

The Exchange rate used by NNPC for payment of domestic crude sales was selected at their discretion.

Update: The issue has been resolved. The conversion rates used by the NNPC to pay for domestic crude oil allocation in 2013 into the Federation Account was as advised by Central Bank of Nigeria (CBN).

10.2 Ongoing Issues Include:

10.2.1 PPT and carry agreements

All issues relating to tax is affected by pricing which is presently in arbitration.

Progress: Updated status report from FIRS to be provided on the current reconciliation exercise with the companies. The issue is unresolved.

10.2.2 Royalty and PPT validation

This is also affected by the pricing which is being contested by the companies.

Progress: Details of audit validation conveyed to FIRS, DPR for review and reassessment to the companies.

10.2.3 Non financial flows

The basis for royalty computation under the PSC has led to disagreement with a consequence of over \$8billion contingent liability.

Progress: Government is advised to renegotiate the terms of the 1993 PSC.

10.2.4 Dividends from NLNG to NNPC - \$11.63billion

Progress: There is no trace of this amount to the Federation Account till date.

10.2.5 Replacement of the 2000 MOU

An agreement in place effective January 2013

Progress: New fiscal regime in place. But the new agreement still doesn't use OSP which is the required regime to use. In addition some years are still being contested.

10.2.6 Production Sharing Contract (Gas treatment)

No defined agreement for sharing associated gas under the PSC

Progress: Issue is yet to be resolved. Government should ensure the signing of these agreements.

10.2.7 Measurement of Crude Oil for payment of Royalty

There is no defined standard for crude oil measurement for royalty purpose.

Progress: Issue is yet to be resolved. DPR is to provide a uniform basis for measurement of crude oil. DPR has proposed a new measurement guideline which was meant to take effect in the Q3 2014.

10.2.8 Management of refined product importation and distribution

PPMC has obsolete measurement equipment.

Progress: PPMC has embarked on the conversion of the loading meters in the depots from Analogue to Digital. The conversion project has already commenced at some depots nationwide.

10.2.9 Pipeline movements and losses of petroleum products through theft and sabotage

Progress: Issue is yet to be resolved. NNPC is collaborating with the relevant security agencies to minimize losses. It is also reviewing various proposals on hi-tech option to minimize vandalism.

10.2.10 Pioneer Status for Covered Entities

Companies were enjoying Pioneer status leading to huge revenue loss to the Federation.

Progress: Issue is yet to be resolved. The recommendation of the Committee that looked into this report is yet to be implemented.

10.2.11 Deduction of Subsidy from Domestic Crude Revenue

NNPC deducts subsidy at source from domestic crude sales.

Progress: Issue is yet to be resolved. NNPC should be made to stop such deductions until an enabling law is passed.

10.2.12 Product Exchange and Importation Arrangements

The OPA/SWAP arrangement is operated at a loss to the Federation.

Progress: Issue is yet to be resolved. Government has been duly informed that this process is fraught with transparency and accountability issues and needs to be stopped.

10.2.13 Fiscal regime used by Addax in Royalty computations

Addax pay their royalty in tranches rather than absolute value in view of the side letter from the Presidential Adviser on Petroleum (20/12/2001).

Progress: Issue is yet to be resolved. The matter is now in the Supreme Court for final adjudication. Government is advised to look into the issue of Side Letters and its implications in view of the huge revenue losses

10.2.14 Royalty for PSC production beyond 1,000 metres water depth

Progress: Issue unresolved. DPR to provides update on the current PSC disputes.

10.2.15 Federation Equity Crude

1. OMLs in which NPDC acts as an operator on behalf of NNPC:

Government pays cash calls to the NPDC for the Aroh and Egbema fields but no record of crude liftings for the federation.

Progress: Issues unresolved. The nation pays cash call for the operation but no crude oil is lifted.

2. NNPC Divestment of some OMLs to NPDC:

NNPC assigned its equity share in 2010-2012 in 8 OMLs under the SPDC JV. The value of the divestment was put at **\$1,847 billion** and only the sum of **\$100 million** was paid in 2014 and this amount was not paid to federation account but into the NNPC/NPDC special account.

Progress: Issue Unresolved. This process did not follow due process in the determination of the assets value, there was no due process in the allocation of these assets. The outstanding amount is still unpaid.